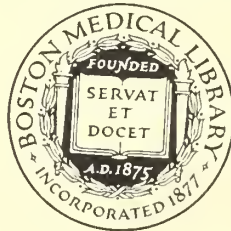


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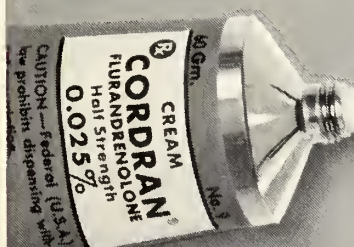
IN THIS ISSUE

- Civil Rights Act of 1964 and the
Medical Profession 23*
- Neonatal Hirschsprung's Disease:
An Often Delayed Diagnosis 41*
- The "Modern" Management of Primary Gout . . 48*
- Index to Volume 35 94*

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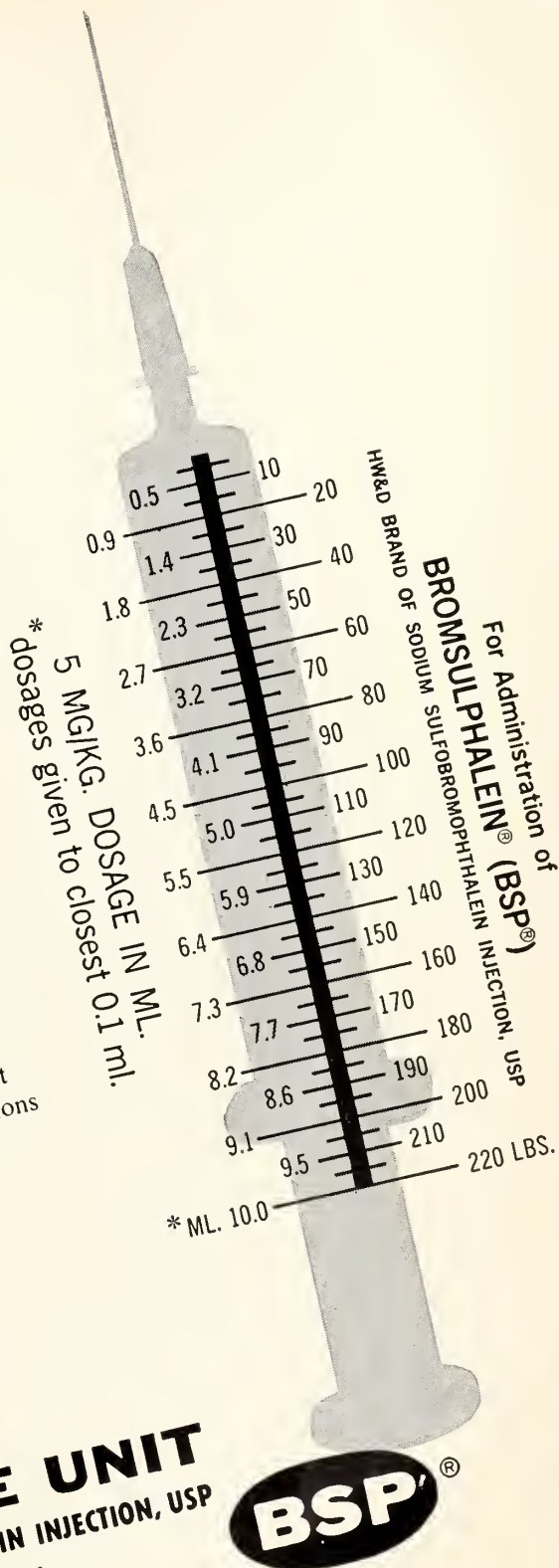
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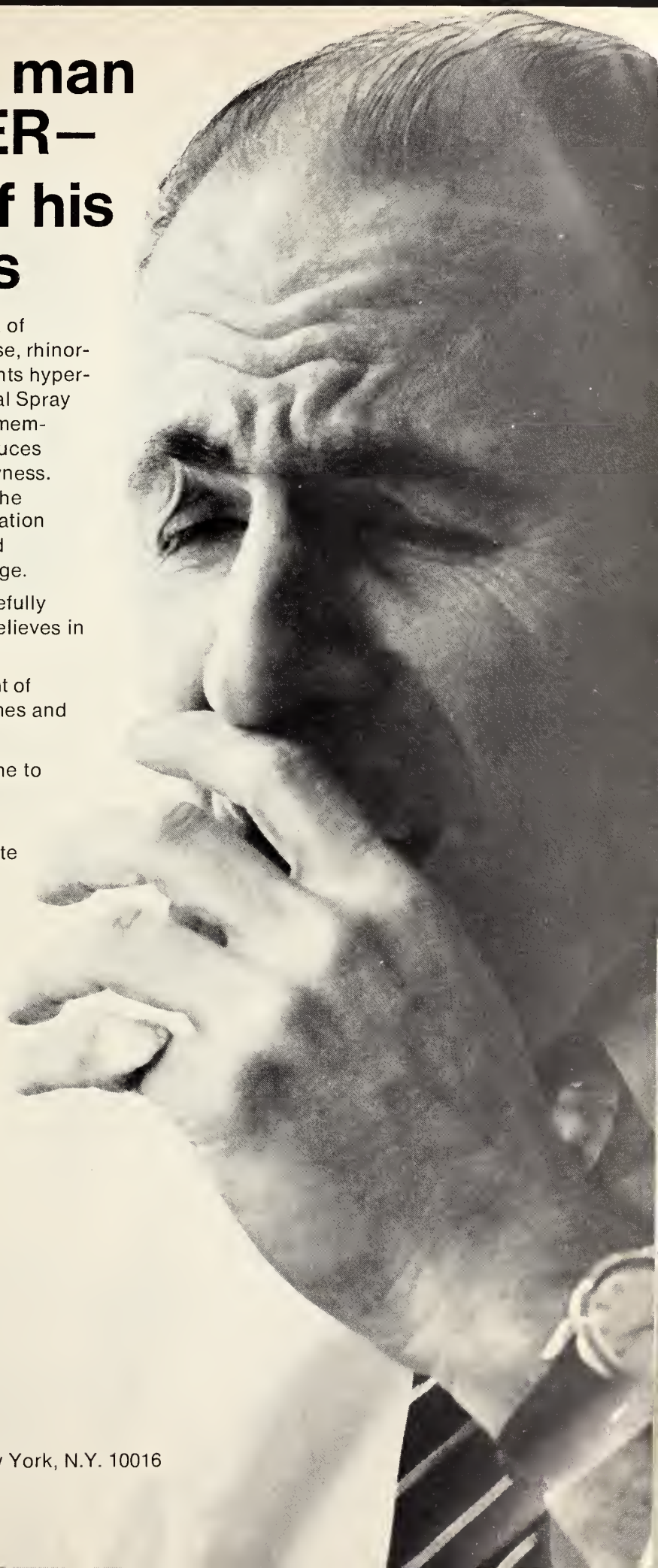
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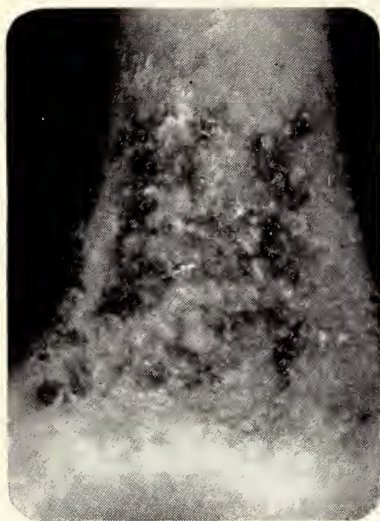
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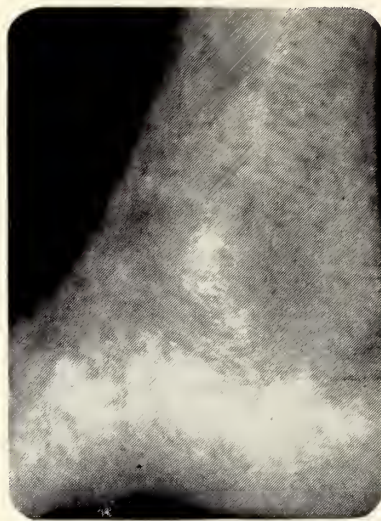
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President's Page

By the time this appears in the Journal, July 1 will have passed and certain impacts of the Medicare program will have been felt by at least a part of our profession and by those hospitals which will have qualified for participation in Title XVIII and certain parts of Title XIX.

In meetings with Mr. Ruben K. King, Commissioner of the Department of Pensions and Security, your Association has been represented by Dr. J. Garber Galbraith, Dr. James G. Donald and myself. Committees from other interested State Agencies and Associations also were in attendance at these meetings. Mr. King requested a list of recommendations for the implementation of Title XIX in Alabama from each organization represented. Our recommendations were as follows:

(1) We concur in your recommendation that the program be initially based upon the present list of recipients of public assistance as delineated in the applicable categories enumerated in your draft proposal.

(2) We concur in the opinion of Governor Wallace that the present contractual arrangements whereby the State Health Department assumes responsibility for the medical aspects of the program should be continued.

(3) After compliance with the mandatory provisions of the Title XIX program (refer to your draft of April 14, 1966), we strongly urge that physician services be provided by "buying in" on Part B of Title XVIII and by providing similar services for recipients under Title XIX.

At a meeting of committees concerned on May 25, 1966, a plan for the implementation



Dr. J. O. Finney

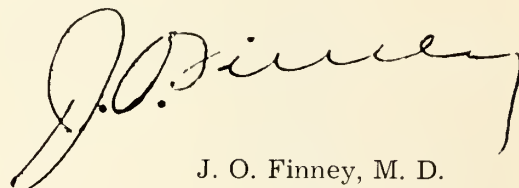
of Titles XVIII and XIX proposed by Mr. King in a letter to Dr. Ellen Winston, Commissioner of the Welfare Administration of the Department of Health, Education, and Welfare was reviewed. Instead of the Department "buying in" on Part B of Title XVIII, it was proposed that the payments to old age pensioners be increased by \$3 per month with the suggestion that this be used by the individual recipient to purchase the insurance for payment of physicians' fees. Under this arrangement, the indigent patient would have to pay the initial \$50 deductible and twenty per cent of any cost accruing thereafter. It was stated that the Department's funds would not permit assumption of fiscal responsibility beyond the \$3 increase in allotment. Step 24 of the proposed plan did state, "We plan to provide some physicians' services for the groups receiving the services referred to above." The "some physicians' services" was not further qualified. Also, in discussion of proposals for implementation of Title XIX, it was stated that the suggested arrangement would entail the Health Department handling some of the medical aspects of the program. Clarification on the matter of the provision of physicians' services under Title XVIII and of a

proposal for the handling of those medical aspects of Title XIX not delegated to the Health Department was sought in a letter to Mr. King following the May 25 meeting. In the same communication, it was pointed out that these programs are basically medical in nature and as such our profession must not only continue to render service to the medically needy but must also shoulder the burden of demanding proper utilization of available facilities.

On Saturday, June 25, the AMA is to hold a Conference in Chicago, at which time it is hoped regulations for operation of Title XIX will be ready for review. After this con-

ference, the Central Office of the Association, with Mr. Patterson directing, will plan orientation programs in reach of all members and their office personnel. By that time, we may have definitive answers, not now available, to your many questions on this vital matter of Medicare.

Sincerely yours,



J. O. Finney, M. D.
President.

Annual Meeting Of Flying Physicians Association—Sept. 11-16

The 12th annual meeting of the Flying Physicians Association will be held at the Dunes Hotel, Las Vegas, September 11-16, according to Thomas D. Davis, M. D., 3816 Ashley Dr., S., Mobile, who heads the Alabama chapter of 20 members.

In announcing the forthcoming meeting, Dr. Davis noted that the scientific sessions will be primarily concerned with discussions of the various medical disciplines as they might ultimately relate to general aviation.

Among the men who are scheduled to participate in the program and the subjects they will discuss are Stanley H. Bear, Colonel, USAF, MC, director of base medical services, at Edwards Air Force Base, "Medical Problems Associated with Test Pilots of High Performance Aircraft."

John R. Fraleigh, M. D., Los Angeles, "Radiological Findings of Pulmonary Pathology in Space Capsules."

George F. Bond, Captain, MC, USN, assistant for medical effects, Office of the Chief Scientist, Special Projects Office, Department of the Navy, Washington, "High Pressure Physiology—The SEALAB Experiments."

The Flying Physicians Association was organized in 1954 within the medical profession for those who have a medical interest in aviation.

Membership is open to all licensed physicians who are members of medical societies approved by the board of directors. At the present time, membership in the association exceeds 1,800 physicians.



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Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses.

Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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MOST HOSPITAL RADIOLOGISTS WILL SEND OWN BILLS

More than half of American radiologists practicing in voluntary hospitals will begin sending their own bills to patients during 1966, based on partial returns of a poll of College members made late in May.

From 2224 responses counted thru May 31, some 139 radiologists already have begun their own billing and 410 have completed arrangements to start at an early date, most commonly July 1.

An additional 690 indicated that they currently are negotiating for the change and a further 294 say that early efforts to begin separate billing have met with resistance. Another 162 said that they plan to advise their hospitals of their intent to begin separate billing in the near future. Only 111 members said that they had no intention of changing their present relationships with hospitals. Of the 2224 respondents, 418 said that they do not practice in voluntary hospitals.

"These figures are highly encouraging," said ACR Board chairman Dr. J. E. Miller of Dallas, Texas. "They indicate that more than a third of our members have already made their arrangements and that only a small group of radiologists have been unwilling to attempt separate billing. No longer will it be said that radiologists are different from other physicians and seek special privileges."

The survey was sent to all of the approximately 5800 College members and fellows practicing in the U. S. Canadian members, associates and corresponding members plus retired and emeritus members were not questioned.

Signatures were not required on the re-

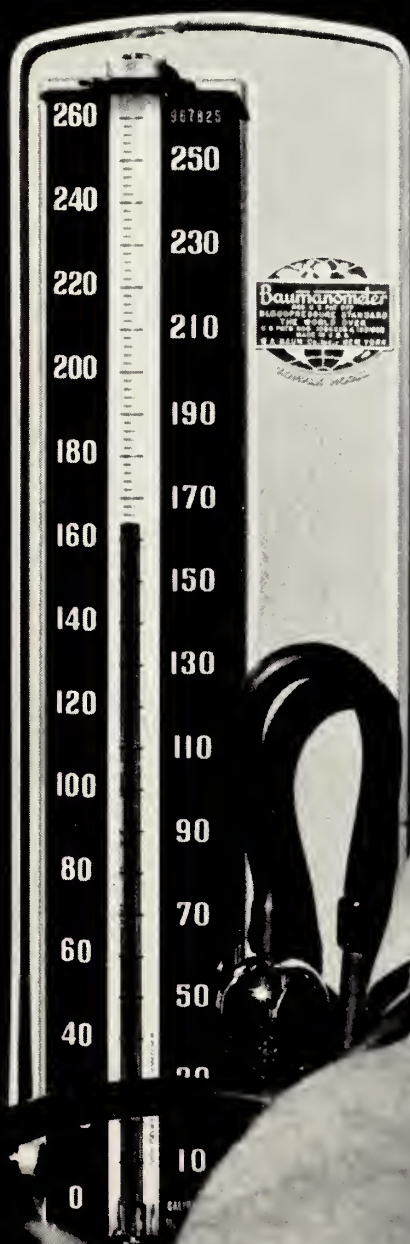
turns. However, enough members signed anyway to indicate that some returns covered not only the signer but also a partnership of several radiologists. In addition, postmarks on the reply cards showed a wide distribution of responses. These included states like Wisconsin, Tennessee and Georgia, where early efforts toward separate billing have shown progress toward the change, and also from New York City, where strong hospital and insurance opposition exists.

Respondents indicating completion of agreements to begin billing included the chairmen of several large university teaching departments. Arrangements for separate billing also were reported by radiologists covering several small rural hospitals on a part-time basis.

"Our efforts should snowball," said Dr. Miller. "The more changes we show to separate billing, the more cooperation we can get from insurers, government agencies and even hospitals which have opposed separate billing."

He cited reports from several states including Massachusetts, Indiana and Arkansas that Blue Shield plans were arranging to take over payment of professional fees for radiologists in hospitals when billed by the radiologist himself. In addition, the Health Insurance Council, representing the commercial insurers, has reaffirmed its intent to provide coverage based upon the way services are billed, the chairman said.

"We expect that many hospitals will find less cause to object to the idea of separate billing when they see that it works smoothly and fairly in other comparable institutions," he predicted.



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Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

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References: 1. Telfeyan, S. A.: Clin. Med. 70:1668, 1963. 2. Shepard, H. L.: J. Am. Geriatrics Soc. 11:363, 1963. 3. Cummings, D. E.; Goodman, R. M., and Steigmann, F.: J. Am. Geriatrics Soc. 12:161, 1964. 4. Castleman, B., ed.: New England J. Med. 268:1462, 1963.

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Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice* 1966-67, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

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The Woman's Auxiliary

Dear Darlene:

Thank you for giving me this opportunity to mount my soapbox for American Medicine.

I don't know why we have to experience something personally before a truth is brought home to us—but that's the way we are built! Forty-two years as the wife of a physician and active membership in medical auxiliaries have taught me the superiority of American Medicine—or so I thought. But it was not until my husband needed medical care in a foreign country that I *fully* realized how fortunate we are to live in *this* country where physicians *know and practice the best medicine in the world*.

I can speak with deep conviction because we have so recently experienced the callous, backward approach to the initial sickness or injury of any patient. The standard approach, regardless of where we were, was:

1. "What do you want?"

2. "What do you want *me* to do about it?"

If you had not made your own diagnosis, you were out of luck. This was government medicine in action! Brief, non-committal and rude!

My husband and I have just returned from an around-the-world cruise—the only real vacation in those 42 years. We had counted on three months of freedom from hospitals, patients, meetings and the imminent problems of Medicare. Three weeks after we left home, he slipped going into Angkor Wat in Cambodia and fractured the surgical neck of the right humerus. So began our varied experiences with foreign doctors and hospitals.

Cambodia is the most primitive country we visited. Fortunately, Siemreap in the interior where the "Lost City" is located had a small hospital with native staff. Just two weeks before our visit, a small french X-ray machine had been installed—but no one knew how to use it! X-ray facilities are basic here but quite a luxury there. Bill sat in a chair



Mrs. Ira B. Patton

—no X-ray table—and directed the procedure with the *nurse holding the film*. It took a hot argument in sign language to avoid an obsolete "airplane cast" and some time in one of the wards. My signature on government forms got us out of Cambodia the next morning.

In Bangkok, equipment and treatment were more modern. Here we met a doctor trained in Georgia but he had been there too long to have heard of a "hanging cast" and of enzymes to absorb bruised blood. Good pictures showed the bone in desirable position; we picked up a clean sling and more aspirin and got out of there quickly before we were all electrocuted from the water standing on the X-ray room floor.

The beautiful British hospital at the end of the "Queen's Necklace Drive" in Bombay surprised us by being even less modern. In answer to the standard approach of "what do you want and what do you want me to do" my husband told the British physician that

he had "an impacted fracture with a little angulation," needed pictures to take along and something for pain. Apparently the hospital had no up-to-date orthopedic book for reference because he rummaged around and finally found an old loose-leaf book with his school notes, identified the fracture and angulation, argued about a cast, which Bill knew would leave him with stiff elbow and wrist, and eventually washed his hands of us. After five hours of waiting around we left with a clean sling, ointment to rub on the bruises and "baby aspirin"! I thought about this when I read not long ago about how long it took to unload our grain in Bombay—when "the amazing American 20th century know-how that speeded food to India ran smack into the stagnation of India's 18th century methods."

It was the Jewish Sabbath when we crossed through the Mandelbaum Gate into Jerusalem Israel so no pharmacies were open and the streets were empty. Even hospital gates were closed but our guide finally found a dispensary whose doctor checked the position and gave my husband still another form of cheap aspirin so we could continue our sightseeing. As a young physician in Viet Nam recently said, "headache powders are the only weapons against pneumonia, smallpox, tuberculosis etc." I would like to add "fractures" to that! Aspirin in some form is universal.

If you wonder about the ship's physician, he was a neurosurgeon who had not seen such a fracture since medical school. This type

fracture is not too common. Fortunately for us it was the only kind which would allow us to go ahead without spending time in hospitals for reduction or immobilization. The ship's doctor was only too glad to let Bill take the responsibility. With 175 passengers whose average age was 60 and 350 crew members to keep well he was too busy practicing geriatrics and tropical medicine to bother about a "hanging cast."

We are grateful to these men who practiced the best medicine that they knew. We are thankful that Bill knew how to care for his break even with a sling and a handful of the universal drug. Bill says *he* is glad that none of these men had ever heard of the "man on the farm who had to shoot his wife because she broke her leg." We think we got off very well indeed because there is no stiffness and he can operate once more.

It will be my mission in life to tell all who will listen to "Thank God daily for American Medicine and the physicians—our husbands—who have helped to perfect it!" To all Auxiliary members I say, "Thank God daily, too, for your opportunity as medical wives to give knowledgeable, intelligent assistance to all that the medical profession undertakes."

And the moral of this tale, Darlene, is: Don't wait until after your 60th birthday to travel and *always* take your doctor with you!

Love,

Louise.

(Mrs. William G. Thuss, Sr.)

HOW TO BEAT THE ANTIVIVISECTIONISTS

When it comes to combating the tearful testimony of the various antivivisectionist groups we may be required to become just as emotional by using the testimony of grateful people who now live because of the contribution animals have made to medical knowledge. We must not be complacent. This is the year for the antivivisectionist—unless we combat emotions with truth.—Daniel B. Powell, M. D., in *Texas Medicine*, (62:27-28) February, 1966.

***A Key Site of Action of the
Protoveratrine A in Salutensin***

**"The main function of the
carotid sinus is regulation of
the blood pressure...."¹**

**The veratrum component of
Salutensin acts here (and in the
myocardium), initiating
"...a reflex fall in blood pressure
through a generalized vaso-
dilation and fall in heart rate."²**



This is a logical Blood Pressure Regulator

**BECAUSE
IT ENHANCES
THE BODY'S OWN
MECHANISMS
FOR REDUCING
BLOOD PRESSURE**

In mild to moderate hypertension:

Salutensin enhances the body's own mechanisms for lowering blood pressure. The veratrum component of Salutensin acts on the carotid sinus and myocardial receptors, initiating "...a reflex fall in blood pressure through a generalized vasodilation and fall in heart rate."² To achieve this reflex modification of hypertension, Salutensin utilizes protoveratrine A. In addition, to facilitate and maintain blood pressure reduction, Salutensin incorporates reserpine and a highly effective thiazide. In general, side effects have been

reported infrequently but may include those listed in the therapeutic summary.

Simple dosage—low-cost therapy: Many patients on Salutensin respond to 1 tablet *b.i.d.* Long-term economy is assured, since dosage can frequently be lowered after initial control is established.

Available: Prescription-size bottles of 60 tablets.

References: 1. Editorial: JAMA 191:592 (Feb. 15) 1965. 2. Meilman, E., in Moyer, J.H.: Hypertension, Philadelphia, W.B. Saunders Company, 1959, p. 395.

BRISTOL THERAPEUTIC SUMMARY
For complete information consult Official Package Circular.

Indications: Essential hypertension.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

Contraindications: Salutensin is contraindicated in severe depression.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss, which may cause digitalis intoxication, responds to potassium-rich foods, potassium chloride or, if necessary, stopping therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy two weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution with patients with peptic ulcers or renal insufficiency (if severe, Salutensin is contraindicated).

Side Effects: Hydroflumethiazide: Purpura plus or minus thrombocytopenia, hyperuricemia, leukopenia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. **Reserpine:** Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth and, with overdosage, agitation, insomnia and nightmares. **Protoveratrine A:** Nausea, vomiting, cardiac arrhythmia, prostration, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet *b.i.d.*

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Co.
Syracuse, New York

Salutensin[®]

Each tablet contains:
protoveratrine A, 0.2 mg.;
hydroflumethiazide, 50 mg.;
reserpine, 0.125 mg.



THEY LIKE US; WE LIKE THEM

An eminent physician was invited to accept a responsible position at the University of Alabama Medical College. Before making his final decision he asked this question: What is the relationship between the Medical College and the physicians of Alabama?

We who live upon the scene may find it difficult to comprehend why such a question should be raised in the first place. And even when it is raised, why it should be a factor in determining for a medical educator whether he should cast his lot with fellow physicians in the state.

While there is a universal cleavage between town and gown, and more than one Alabama physician has complained loudly that medical schools are more intent upon training instructors and future professors than practicing physicians, long-time observers on the Alabama scene are agreed that a most harmonious relationship exists between this Association and the Medical College leadership and faculty.

But the question posed above set us to doing a bit of research, and we turned to those calculated to be best informed on the matter. Reported one official of the Association:

"It is my opinion that relations have never been better than at present. One of the first actions of Dean S. Richardson Hill Jr., after

becoming head of the Medical College, was to appear before the State Board of Censors to offer his full cooperation to Organized Medicine and to reaffirm his desire to make postgraduate instruction available to practicing physicians throughout the State. This has been accomplished through the Continuing Medical Education Program with seminars being held almost on a monthly schedule.

"Also," he continued, "at the request of the Medical College, each County has a physician advisory member to the Medical College of Alabama, which has resulted in better liaison between the College and practicing physicians.

"The Medical College encourages its faculty to participate in the scientific programs of the Annual Session of the Association. In the past three years there have been an average of five faculty members on each program."


There are numerous other examples of perfect coordination between these interdependent entities. Who can overlook last year's legislative program when the Medical College's expansion program was at stake. The institution was threatened with loss of a \$10 million bond issue when the Association

(Continued on Page 19)

ANNOUNCING a potent combination in
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in
chewable
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for oral
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When combination antibiotic
therapy is indicated...



CONSIDER: an exceptionally high cure rate in susceptible infections

The rationale: When combined, Erythrocin and the trisulfapyrimidines (triple sulfas) are indicated in infections that are more susceptible to the combination than to either agent alone. Such conditions are usually found in urinary, lower respiratory tract and chronic ear conditions.

The results: Clinical studies involving 142 young patients showed *an overall cure rate of*

96.5%. Side effects were experienced by only four of the patients.

The acceptance: The majority of the 142 patients studied expressed a definite liking for the products. *There were only two refusals.* An independent taste-test with 50 healthy children further substantiated the excellent acceptability of the orange-flavored forms.

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In Granules for Oral Suspension*



ERYTHROCIN-SULFAS

Brief Summary

Indications: Use Erythrocin-Sulfas in infections more susceptible to the combination than to either agent alone. These are usually found in urinary, lower respiratory tract, and chronic ear infections.

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or new born infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions: Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

If a reaction or overgrowth of nonsusceptible organisms occurs, withdraw the drug.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. each of sulfadiazine, sulfamerazine and sulfamethazine. 603303



took immediate and positive action to save the day.

In many other legislative matters the Association placed its full resources at the disposal of the Medical College with salutary results. There was the Medical Scholarship Law—a model law which has attracted nationwide interest, just to cite one more example.

How gratifying it is to enjoy this atmosphere of cordiality between professor and practitioner, in contrast to some States where outright hostility exists. Regard, for example, these first two paragraphs from an editorial in the Massachusetts Physician:

"The eggheads in medical training are having a field day. Currently, they appear to hold the ear of the politicians who are planning the future of medical care. All that they can see is university medicine. This they believe to be the answer to caring for the needs of the sick.

"These MDs have the support of the teaching hospitals. Their professional and lay personnel have all to gain by expanding facilities. Training more medical students to become hospital specialists in research and didactic teaching perpetuates the cycle. The supply of teachers and researchers increases, but this does not answer the demand for practicing physicians. Nationwide, the number of MDs who care for the sick decreases."

\$11,020.10 For AMA-ERF

AMA-ERF contributions report for 1965 shows Alabama physicians gave as follows: specified medical schools, \$3,635; unspecified medical schools, \$56; unrestricted fund, \$795; loan guarantee program, \$1,212. The total amount is \$5,698.00.

A check in the amount of \$11,020.10 will be presented to the Medical College of Alabama during the Annual Session of MASA.

HISTORY'S LESSONS

By The Rev. Robert P. Varley, Th. D.

Rector, St. Peter's Episcopal Church, Salisbury, Md.

Perhaps the only safe thing to say about history is that we learn nothing from history. Each generation feels itself wiser and stronger than those of the past, and therefore immune to the hazards of history. Religion and philosophy, politics and science, education and economics have poured their individual balm upon the wounds of the world, and yet we suffer and struggle, deplore and despair. All the while, the mute testimony of history stands wonderingly and helplessly by, because we ignore her.

High taxes, limitless debts and socialistic sentimentality have toppled more empires than all the armies who have marched across the pages of human history.

Look at the lessons. Listen to the hollow voices of past calamity. These are individuals, people just as you and I. Living souls used as pawns in the game of personal power. Living bodies crushed and beaten not by force of arms but the victims of a cultural cancer called socialism. If we do not heed the vacuous voices of the past, we soon will blend ours with theirs in a dirge of despair.

If we would cure the cultural cancer which creeps ceaselessly over our land, then we must let history be our teacher.

The welfare state is not new. It has been disastrously tried in many centuries. Insidiously it creeps over us without our knowing it. Like cancer, its evil work is done silently, and when we do become aware of its presence, it is all too often too late. For this reason, responsible people who care enough for freedom and dare enough for integrity must look closely at the times

within which we live. Already the symptoms of infection are clear. Need we wait for the coroner's report before we act?

Look at our world in the light of history and observe the events of today. There can be no doubt that current governmental philosophy seeks to become the shepherd of all. Is there any area of human enterprise in this country today which is free from controls and restrictions laid down with little or no regard for the individual and his God-given freedom to be responsible for his own destiny? In the fields of manufacturing, economics, urban affairs, personal health, and education, no one dare move without first attempting to ascertain what the Government has in mind.

Look at another side of this coin. When man is conditioned by education or by empty promises, to look outside himself for his security, he is not only trading personal enterprise for an insecure security but, more important, he is allowing his personal dignity and integrity to be submerged into the miasmic mire of collectivism.

Look at the campaign promises of contemporary politicians: the platitudinous promises offer more food with less work, more money with less effort, more security with less assurance. What have we now? A compressed, regulated, enervated and stupefied society with which it has almost become a sin to be different, to defy the cult of conformity, and to dare to assert one's right to be uncommon if he wants.

Freedom has been committed to our hands, committed by the grace of God and sanctified by the blood of our forebears who sacrificed so that in due time we might enjoy its blessings. Is our commitment any less? What legacy will we leave to our children, yes,

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Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

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even to generations as yet unborn? It is a fact of physical life that "like begets like." A softened, bent, and misguided people can only reproduce sons who will be twice the children of disillusionment.

Regardless of the motives, when man is reduced from a proud being, created in the image of his God, to the level of a timid animal looking constantly to a super-bureaucracy for the very substance of his life, then we are well on the road to prostituting the very purpose for which God made man. To be free, a man must be free to choose. He can select either the pull of heaven or the tug of hell. But man must choose. Animals have not the power to choose. Even if we deny in only one area, health, education, politics or social structure, man's inherent right, then we have undermined the basic proposition so long held in the Judeo-Christian religious tradition.

It is of little value to just excoriate the ills of our day, unless we are willing to present at least the possibility of cure. Also, when we stand before the magnitude of the problem, we tend to say that as individuals we are powerless. This is just the attitude the proponents of the welfare state hope we will take, when, in reality, there is something we can do.

First, we must confess that no one individual or small group can change the entire course of human events at present. But in this acknowledgment, we must stand firm again in history's lesson that any small group of concerned people can change history within a given area. Remember how 11 frightened men on a mountaintop saw the source of their strength return to heaven but, by their efforts, the whole of Western culture was changed—Christ's life on earth ended with only the legacy of 11 frightened but dedicated men.

Thus we can, and must, within the limits of our own communities, churches, civic organizations and our own families begin to awaken concern for and awareness of the dangers which threaten our freedom. Do not

(Continued on Page 22)

HISTORY'S LESSONS

(Continued from Page 21)

try to convert the world. Work within the limits of your own sphere of influence.

Secondly, before we can really become effective apostles of freedom, we must know what freedom is and what threatens freedom's discontinuance. You and I cannot defend something we do not know and we cannot protect against an enemy we do not understand. Professional groups of all sorts must lift themselves from their professional isolation which concerns itself only with the mysteries and vagaries of its own selfish interest. You must look at the world around to see the culture within which you live; to understand the needs of your fellow creatures; and to form effective alliances with men of goodwill who seek to preserve indi-

vidual integrity and human freedom. This is the work of churches, bar associations, medical societies, educational forums. Yes, this is the work of the P. T. A.'s, bridge clubs and social circles.

This we must all do before the boredom of dependence so enervates us and our children that we surrender our freedom for the cage of security. A super-government, even with the air of benevolent paternalism, soon develops into a merciless keeper of the cage which robs us of our freedom. This is one of history's undeniable lessons. Learn it well lest we, like Russia's imprisoned millions, some day look back in anger, look at the present in disgust, and look forward in despair.

Freedom is divine in origin and human in expression. Freedom is not easily won and not maintained without concern.

Dr. Huckabee Named President Of Federation For Clinical Research

Dr. William E. Huckabee, Associate Professor of Medicine at Boston University School of Medicine, Boston, Massachusetts, became the 26th President of the American Federation for Clinical Research during the course of the Federation's annual national meeting held in Atlantic City, May 1, 1966. The Federation is the nation's largest society of physicians engaged in research and teaching. Some 4,000 members and guests were in attendance at the 1966 meeting.

Dr. Huckabee succeeded Dr. Richard J. Havel, Associate Professor of Medicine at the University of California School of Medicine, San Francisco, California. Dr. Henry N. Wagner, Jr., Associate Professor of Medicine and Radiology at The Johns Hopkins Medical Institutions in Baltimore, Maryland, was elected President-elect to succeed Dr. Huckabee in 1967.

Dr. Jay P. Sanford, Professor of Medicine at University of Texas Southwestern School

of Medicine, Dallas, Texas, continues his three-year term as Secretary-Treasurer of the Federation. Dr. J. D. Wilson, Associate Professor of Medicine at University of Texas Southwestern School of Medicine, Dallas, Texas, was elected Councillor for a five-year term. Dr. Rubin Bressler, Assistant Professor of Medicine at Duke University School of Medicine, Durham, North Carolina, was re-elected Councillor for a two-year term.

Dr. Stuart O. Bondurant, Associate Professor of Medicine at Indiana University, continues as Editor of *Clinical Research*, the Federation's official publication.

The American Federation for Clinical Research was established in 1940 and its purposes are "To promote and encourage original research in clinical and laboratory medicine" and "To welcome as members and provide an accessible forum for young persons engaged in such research."

CIVIL RIGHTS ACT OF 1964 AND THE MEDICAL PROFESSION

The Civil Rights Act of 1964 is not directed at the medical profession or at the practice of medicine. It does, however, have many direct and indirect consequences affecting medical practice and the medical profession.

This is a rapidly developing field of law. It is likely that there will be continuing developments under this statute which cannot be foreseen at this moment. To the extent that the effects of this statute are known or can be foreseen, they are summarized below. The summary is made on the basis of the eleven titles of the Act.

Title I—Voting Rights.

This Title has no direct and little indirect effect upon the medical profession or medical practice. To the extent that it is effective in assuring voting rights for Negroes, it may bring about some changes in Congress, particularly in relation to the southern states.

Title II—Injunctive Relief Against Discrimination in Places of Public Accommodation.

This Title does have a minor direct effect on the practice of medicine. A physician who has an office in a hotel, motel, or resort and who has a formal or informal arrangement to provide medical care to guests must do so without discrimination on the basis of race, color, religion or national origin. It does not appear at present that a physician will be subject to this Title under any other circumstances.

Title III—Desegregation of Public Facilities.

This Title does have a substantial effect on the medical profession. It applies to any public facility which is owned, operated, or managed by or on behalf of any State or

subdivision thereof, other than schools or colleges. This would include hospitals, clinics, health centers, and other agencies operated by or for States, Counties, Municipalities, Districts, or other governmental units. Physicians who practice medicine under an employment contract or other arrangement with such agencies are prohibited from discriminating on the basis of race, color, religion or national origin in relation to persons who are entitled to medical care or other benefits provided by such facilities. Such discrimination was probably already unlawful, but the statute provides for more effective enforcement through the use of injunctions.

Title IV—Desegregation of Public Education.

This Title has an indirect effect on the medical profession, primarily because of its application to State medical schools. Such schools are prohibited from discriminating in any manner on the basis of race, color, religion or national origin with respect to the admission of students. This kind of discrimination was already unlawful, but the statute attempts to provide a more effective remedy by authorizing suits by the U. S. Attorney General. If effective, it should increase the opportunity of members of minority groups to get a medical education.

Title V—Commission on Civil Rights.

This Title has little, if any, effect on the medical profession. It extends the existence of the Commission to January 31, 1968. The primary purpose of the Commission is to gather and furnish information on discrimination.

Title VI—Nondiscrimination in Federally Assisted Programs.

It appears that this Title has the most far-reaching effects upon the medical profession. It applies to virtually all programs or activities, whether governmental or private, where financial assistance is provided by the federal government. It provides that no person shall, on the ground of race, color or national origin, be excluded from participation in, be

Prepared by the Law Department of the American Medical Association. This article contains a brief analysis of the effects of various provisions of the Civil Rights Act of 1964 on the medical profession. Any State Association or County Society which has specific problems relating to this law should consult with its own attorney.

denied the benefits of, or be subjected to discrimination under any such program or activity. Discrimination on the basis of religion is not specifically prohibited, apparently because federal assistance has and will continue to be given to certain church sponsored agencies for the specific purpose of providing benefits to members of the church. It may be, of course, that religious discrimination is unlawful apart from this statute.

The physician in private practice comes in most direct contact with the law if he undertakes to render professional services to a beneficiary of such federally assisted program. This would include welfare patients under federally assisted governmental or private programs, including general welfare programs, rehabilitation programs, child care programs, and any other programs in which medical care is furnished. It appears that it will apply to assistance to the medically indigent under the Kerr-Mills type of program and to medical care for persons over 65 under the Social Security medical care insurance program. This Title does not prohibit the physician from discriminating. Rather, it provides that he cannot be paid for his services under the federally assisted program if he does discriminate.

Under the federally assisted program, the welfare agency can provide medical care either through its own employee physicians or by making contractual arrangements to pay for services of private physicians for the care of beneficiaries. The latter arrangements are called vendor contracts. These contracts are commonly used to provide beneficiaries with medical care and other services and goods.

The principal controversy which has, thus far, arisen under this Title involves these vendor contracts. The Regulations issued under this Title require the agency which receives the federal financial assistance to establish a procedure that will give assurance that beneficiaries under the program will be treated without discrimination. These procedures are subject to review by the Department of Health, Education, and

Welfare with respect to their adequacy to effect their purpose. The state or private agency which receives the assistance has the primary responsibility for devising the procedure, but the Department has issued guidelines to advise the agencies as to what kind of procedures will be acceptable.

The Department originally issued guidelines indicating that an acceptable preliminary step in the procedure would be either (a) to have each vendor sign in advance a statement that he will not discriminate in providing service under the federally assisted program, thus establishing a list of eligible vendors, or (b) to have each vendor who provides services sign a similar statement each time he submits a claim for payment under the program. These procedures met with general opposition from physicians, because they felt that they were being asked to sign something like an exculpatory oath. As a result of this protest and because of negotiation by AMA and state medical associations, the Department issued a new guideline indicating that it will accept an initial procedure in which a notice of the requirements of the statute is printed on the back of the voucher form used to claim payment for services. The vendor, of course, must sign the voucher in order to be paid, but he does not have to sign a statement of non-discrimination. This third procedure would appear to eliminate the basis for objection by physicians.

It is nevertheless the obligation of the agency which receives the federal assistance to determine which of these three procedures will be used. The agency may also devise some other procedure which would be applicable if approved by the Department. It is most appropriate and desirable that the state medical association consult with and negotiate with the various agencies in the development of these preliminary procedures and other procedures which affect their physician members.

It must be emphasized that these preliminary procedures are only a small part of the problem. The agencies have an obligation

under the statute to develop a program which will provide continuing assurance that discrimination is not practiced against beneficiaries. At least, this would require some way for investigating complaints. It might require much more. The state medical associations have every right to exercise their influence in shaping these policies, and it is in the best interest of their physician members that they do so.

Under this Title, no physician is required to accept welfare patients eligible for benefits under federally assisted programs. If he does accept such patients, individually, he is not required to accept payment from the welfare agency. If he wants to be paid by the agency, however, he may not discriminate among welfare patients on the basis of race, color or national origin. If he accepts payment and does discriminate, the government can probably recover the payment. Beyond this, there does not appear to be any penalty. It also does not appear that the physician's legal position is materially affected by the statement or notice procedures.

There does not appear to be anything in the statute which prohibits a physician from treating all federally assisted patients differently from all other patients, provided that there is no discrimination within these classes on the basis of race, color or national origin. The question has not yet been decided, but this might permit separate offices, separate days or separate hours for covered welfare patients.

This Title also applies to all federally assisted hospitals. This would include all Hill-Burton hospitals. It would also probably apply to all hospitals which receive payments under the Social Security hospital insurance program or under the Kerr-Mills type of programs for the medically indigent or under any other federally assisted welfare program. Few, if any, hospitals would not be included.

Hospitals subject to the Title may not discriminate in admission of physicians to the staff or interns, residents, nurses, or technologists to training programs. They may

not discriminate in admission or care given to patients. They may not maintain separate facilities or accommodations on the basis of race, color or national origin. The Department of Health, Education, and Welfare has taken the position that a hospital may not refrain from assigning persons of different race to the same multiple-bed room or ward, unless the attending physician certifies that it will be seriously detrimental to the health of his patient if he is assigned to a room occupied by a patient of another race. The Department also takes the position that the hospital must question the decision of the attending physician if it appears that he makes such certifications routinely or as a matter of course. The Department has indicated that a hospital may not assign patients to rooms on the basis of their own preference or on the basis that patients having the same attending physician should share the same multiple-bed rooms, but there is some doubt as to the statutory basis for this position.

The hospital may not permit any of its staff or employees to discriminate against patients. This Title does not prohibit discrimination in employment, except in situations not generally applicable to hospitals; but such discrimination is in most instances prohibited by other provisions of the statute.

Private medical schools, educational or research foundations and other similar institutions which receive federal funds are similarly subject to this Title. Such institutions do have an impact on the medical profession, and they are prohibited from substantially the same broad spectrum of discriminatory practices as are hospitals.

Enforcement of this Title is based upon the withholding or recovery of funds or property received by the federally assisted agency. Remedial action of this nature, however, cannot be undertaken until after there has been (a) a reasonable effort to secure voluntary compliance, (b) a full and fair administrative proceeding, and (c) a report to the committees of the Senate and the House of Representatives which has jurisdiction over the fed-

eral assistance program which is involved. No remedial action can become effective until 30 days after such report is filed.

Title VII—Equal Employment Opportunity.

This Title has some, but not a substantial, effect on the medical profession. It prohibits discrimination on the basis of race, color, religion, sex or national origin in the hiring, promoting, classifying, or discharging of employees or with respect to compensation, terms, conditions, and privileges of employment. It is generally applicable to employers in an industry affecting interstate commerce. This is the same coverage as the Labor-Management Reporting and Disclosure Act. The individual physician in private practice or the small medical partnership has never been held to be subject to that Act. It does not appear that this Title would apply to them, at least in the absence of some contractual relationship with an interstate carrier or a manufacturer engaged in production for interstate commerce. With a larger clinical group, there might be a situation in which it would be covered.

There is also an exemption based on the size of the payroll. An employer with less than the minimum number of employees (100 until July 1, 1966; 75 until July 1, 1967; 50 until July 1, 1968; and 25 thereafter) is expressly exempted from the provisions of this Title. Except for the larger clinical groups, this would seem to exclude most physicians in private practice.

The Title would probably be applicable to most private hospitals. Governmental hospitals are apparently exempt, but discrimination may be unlawful under other laws.

Private medical schools, educational or research foundations, and other similar institutions would probably be covered. Governmental institutions of a similar nature probably would not, but would be subject to other laws.

It is not entirely clear whether medical societies would be subject to this Title. County societies might not be considered to

be in an industry affecting commerce. State societies would probably be considered in such an industry because of their communications with each other and with AMA. AMA and other national societies would undoubtedly be considered in such an industry. Some societies would, of course, be exempted on the basis that their payrolls were below the minimum.

There is also an express exemption for "bona fide private membership clubs." It could be argued that medical societies fall within that category, but there is a strong chance that the courts might disagree. For public relations reasons, if nothing else, it would probably not be advisable to try to take advantage of this exemption.

Unlawful employment practices under this Title may be remedied through procedures of an appropriate state agency and state courts, where such procedures are available, or through the procedures of the Equal Employment Opportunity Commission and the federal courts, where state procedures are not available. Enforcement may result in court orders which will restrain unlawful practices and may require the hiring or reinstatement of an employee with back pay. Such orders may be enforced by contempt proceedings which could result in a fine or imprisonment if the employer defies the court's order. Employers may also be required to keep records and make reports on employment practices. The U. S. Attorney General may also bring court action in appropriate cases to end discrimination in employment.

Title VIII—Registration and Voting Statistics.

This Title has no effect on the medical profession.

Title IX—Intervention and Procedure After Removal in Civil Rights Cases.

This Title may be of some indirect consequences to the medical profession. Under it,

(Continued on Page 29)



makes sleep irresistible

nidar[®]

EACH TABLET CONTAINS:

Pentobarbital Sodium.....	25 mg.
Secobarbital Sodium.....	25 mg.
Butobarbital Sodium.....	7.5 mg.
Phenobarbital.....	7.5 mg.

(WARNING: MAY BE HABIT FORMING)



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Sleep comes easy...lingers...departs naturally

Gentle doses of 4 barbiturates assure uninterrupted sleep

2 barbiturates act fast...in 20 to 30 minutes

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to sustain sleep for up to 8 hours

Tiny amounts of individual barbiturates
means Nidar is well tolerated

Patients enjoy a refreshing, clear-headed wake-up

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Pentobarbital Sodium.....	25 mg.
Secobarbital Sodium.....	25 mg.
Butabarbital Sodium.....	7.5 mg.
Phenobarbital.....	7.5 mg.

(WARNING: MAY BE HABIT FORMING)

 **Dosage:** One or two tablets, one-half hour
before bedtime.

Indications: For night-time sedation and refreshing
sleep up to eight hours.

Contraindications: Patients sensitive to barbiturates.
Use with caution in the presence of moderate to severe
hepatic disease.

Supplied: Bottles of 100 tablets.

CAUTION: Federal law prohibits dispensing without
a prescription.



ARMOUR PHARMACEUTICAL COMPANY
Chicago, Illinois, U.S.A.

(Continued from Page 26)

the U. S. Attorney General can intervene in any suit in a federal court charging discrimination on the basis of race, color, religion or national origin in violation of the Fourteenth Amendment. This might include a suit charging a medical society with discriminatory policies with respect to admission of physicians to membership.

Because of several existing decisions which have recognized at least a quasi-public status of medical societies, there is at least a strong possibility that some courts might hold that it is unlawful for a medical society to deny membership on the basis of race, color, religion or national origin. Although this would be a departure from generally accepted legal rules, it is something which is quite likely to happen in the present political climate.

The statute itself does not prohibit such membership discrimination by medical societies. There is, nevertheless, a strong possibility that such discrimination may be held unlawful, either under antitrust laws or under the Fourteenth Amendment, because

of the participation of the society in governmental functions.

Title X—Establishment of Community Relations Service.

This Title may affect the medical profession. It establishes the Community Relations Service, which has as its function the establishment of procedures to resolve disputes and difficulties relating to discriminatory practices through negotiation and persuasion and without publicity. Of all the agencies established by this statute, this one seems to offer the best possibilities for effectively dealing with racial unrest.

This service might prove to be most beneficial for the medical profession in attempting to solve its own problems of racial discrimination. It is certainly desirable for the medical profession that these problems be solved peacefully by negotiation without publicity, rather than by coercion.

Title XI—Miscellaneous.

The provisions of this Title are technical and do not have any substantial effect upon the medical profession.

CONFERENCE ON INFANT MORTALITY SCHEDULED

A National Conference on Infant Mortality is being sponsored by the American Medical Association's Committee on Maternal and Child Care. The Conference will be held on August 12-13, 1966, at the Fairmont Hotel in San Francisco, California.

An open invitation to attend is being extended to chairmen and members of all state and county Maternal and Child Care; Perinatal and Maternal Mortality Committees; State Health Department Directors of Maternal and Child Health; medical school faculty members in Departments of Obstetrics and Gynecology, Pediatrics, and Preventive Medicine. Other interested physi-

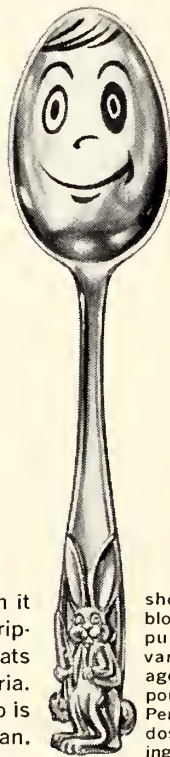
cians and representatives of groups concerned with the problems of infant mortality are also invited to attend. Other subjects to be covered by special speakers will include perinatal mortality studies, obstetric and pediatric education programs, research questions, expectant parent and sex education, and population control.

Those interested in receiving further information about registration for the Conference should write the Secretary, Committee on Maternal and Child Care, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

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Contraindications: Contraindicated in patients sensitive to sulfa or penicillin, pregnant females at term, premature infants, newborns during first week of life. **Precautions:** Watch for hypersensitivity reactions and overgrowth of nonsusceptible organisms. Observe usual precautions for sulfonamide therapy: adequate fluid intake; force fluids if urine volume is low; maintain urinary pH of 7 or higher; use only after critical appraisal in patients with liver or renal damage, urinary obstruction, blood dyscrasias. **Adverse Reactions:** Anaphylactoid

shock (rare), G.I. disturbances, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, urticaria, purpura, hematuria, crystalluria, conjunctival and scleral varicula, petechiae may occur. **Dosage:** Daily pediatric dosage should supply 65-100 mg. trisulfapyrimidines per pound body weight in divided doses q. 4 to 6 h. **Supply:** Pentid-Sulfas for Syrup when prepared, provides 80 cc. (16 doses) or 150 cc. (30 doses) of fruit-flavored syrup providing in each 5 cc. teaspoonful 125 mg. (200,000 u.) potassium penicillin G and 167 mg. each of sulfadiazine, sulfamethazine, and sulfamerazine.

Now . . . **NEW PENTID® '400'-SULFAS FOR SYRUP** (buffered penicillin powder with sulfadiazine, sulfamethazine, and sulfamerazine each 5 cc. providing 250 mg. [400,000 units] potassium penicillin G and 167 mg. each of sulfadiazine, sulfamethazine, and sulfamerazine). Available in 16-dose (80 cc.) and 30-dose (150 cc.) bottles.

For full information, see Product Brief.

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'BILL PATIENTS AS USUAL', AAGP RECOMMENDS

Physicians were urged recently by the president of the American Academy of General Practice to bill their Medicare patients "in the usual and customary manner" and let patients collect from the Social Security Administration themselves.

Dr. Amos N. Johnson, Garland, N. C., president of the AAGP pointed out that the Medicare law lets doctors decide whether they want to bill their patients or bill a government agency. Dr. Johnson added that "fewer problems will arise" if doctors send their bills to their patients and let each patient collect, from the Social Security Administration, an amount specified by the Medicare law.

"In my opinion," Dr. Johnson said, "too many patients are not familiar with this provision of the law. People over 65 think they will be able to seek the services of a physician and pay only 20 per cent of his fee. They believe that the Social Security Administration will then, in all cases, automatically pay the remaining 80 per cent of the doctor's fee. This simply isn't true. Under the law, the doctor is the one who decides whether he wants to collect from the patient or from the Social Security Administration. After talking to many of my patients, I am convinced that physicians can avoid considerable red tape if they continue to bill their patients direct."

Dr. Johnson added that despite "an all-out-effort" on the part of the federal government, many elderly people still don't understand that the Medicare law was never intended to cover all health care costs.

Said Dr. Johnson: "I talk to patients every day who aren't even aware that they are obligated to pay the first \$50 of the physician's fee."

"Direct billing," Dr. Johnson pointed out, "preserves the patient's right to keep his own financial affairs confidential. If my patient wants to pay me and then collect part of the total fee from the Social Security Administration, this is his right and his privilege.

"When one of my patients asks me about the Medicare law, I explain it carefully in understandable language and then let the patient make up his own mind. It's not my place to ask if he has signed up and is thus eligible for Medicare benefits. This is a matter between the patient and the Social Security Administration and it's not up to me to ask unnecessary questions.

"I have also found that many of my patients are not clear on what physician services are covered by the Medicare law. It is basically intended to pay part of the costs incurred in the treatment of remedial diseases. It does not pay for check-ups, physical examinations, drugs, eye examinations, glasses or other needed devices."

Dr. Johnson said that the Academy, second largest U. S. medical group, is on record in favor of direct billing and added that he is of the opinion that "most of our 29,000 members" agree that they should do everything in their power to preserve the confidential patient-physician relationship.

Private Research For Public Health

Progress in the (pharmaceutical) industry depends on research and development . . . The drug firms spent \$298 million for research in 1964, compared with \$282 million in 1963. In 1966, expenditures for research are expected to reach \$370 million. The main products concerned have been psychotropic drugs, new preparations to combat cancer and degenerative diseases, and compounds especially used by aging patients. An intensive search into the physiology of reproduction is yielding important and improved drugs in this field.—Morris Fishbein, M. D., in *Medical World News*, (7:184), March 18, 1966.

"A DRAMATIC INCREASE IN SALMONELLOSIS HAS BEEN OBSERVED"

SALMONELLA CARRIERS PRESENT A FORMIDABLE FIFTH COLUMN."²

Furoxone exerts
"outstanding activity
against *Salmonella* sp."³
and "has enhanced
the physicians'
armamentarium in that
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a relatively effective,
safe bactericidal
agent, which may
be used to treat
the active disease
as well as the
carrier state."²

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Often succeeds where others fail in a wide variety of bacterial diarrheas. Specifically within the broad bactericidal range of Furoxone:

<i>Salmonella paratyphi</i>	<i>Salmonella montevideo</i>
<i>Salmonella schottmülleri</i>	<i>Salmonella newport</i>
<i>Salmonella typhimurium</i>	<i>Salmonella anatum</i>
<i>Salmonella choleraesuis</i>	<i>Salmonella derby</i>
<i>Salmonella enteritidis</i>	

Proper antibacterial therapy for individual cases should help in reducing the total number of cases in an epidemic situation.

Side effects are infrequent. A few hypersensitivity reactions to Furoxone have been reported including a fall in blood pressure, urticaria, fever, arthralgia and a vesicular or morbilliform rash. These reactions subsided promptly following withdrawal of the drug. Primaquine-sensitive patients may develop a mild reversible hemolytic anemia. Nausea, emesis, headache or malaise may occur occasionally. To obviate alcohol-disulfiram type reactions, advise against use of alcohol-containing drugs during therapy and four days thereafter.

Do not give to infants under one month of age.

Composition: Furoxone Liquid contains, per 15 cc. tablespoonful, furazolidone 50 mg., pectin 225 mg., and kaolin 3.0 Gm. Furoxone Tablets each contain 100 mg. of furazolidone.

References: 1. Editorial: J.A.M.A. 189:691 (Aug. 31) 1964. 2. Foertsch, J. H.: J. Oklahoma Med. Assn. 57:449 (Oct.) 1964. 3. Paul, H. E., and Paul, M. F.: The Nitrofurans—Chemotherapeutic Properties, in Schnitzer, R. J., and Hawking, F. (Eds.) Experimental Chemotherapy, Vol. 2, New York, Academic Press, 1964.

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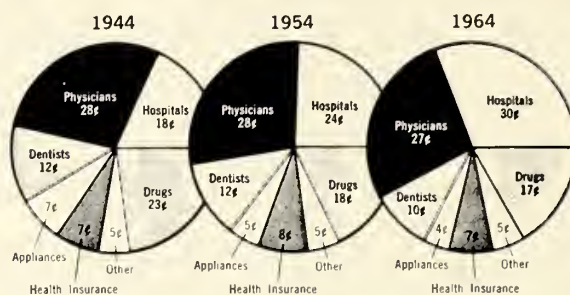
HEALTH EXPENDITURES UP; DOCTORS SHARE DOWN

Americans are increasing their spending for health care according to compilation of the most recently available statistics. However, they still spend more for tobacco than for hospital care, and more for cosmetics and haircuts than for doctor bills.

Spending for health care totaled \$25.2 billion in 1964, according to figures of the U. S. Department of Commerce. That's an increase of 7.8 per cent from the \$23.4 billion spent in 1963.

Hospitals receive the largest share of health-care spending—about 30 cents of every dollar. The total spent for hospital care in 1964 was \$7.6 billion. This compares with \$7.8 billion spent on tobacco products.

Other portions of the health-care dollar are divided among drugs, 17 cents; dentists, 10 cents; health insurance, 7 cents; appli-



ances, 4 cents, and miscellaneous expenses, 5 cents.

The remaining 27 cents goes to physicians. This percentage has declined slightly over the years. Twenty years ago, physicians received about 28 cents of every dollar spent on health care.

Expenditures for physicians' services totaled \$6.8 billion in 1964, compared to \$7 billion spent on personal items such as cosmetics, haircuts, and toiletries.

The chart above shows the variance in total expenditures for health care since 1944.

SURVEY OF CURRENT BUSINESS, November 1965, Vol. 45, No. 11.

SOURCE: U. S. Department of Commerce, Office of Business Economics, pp. 20-23. (Calculations by Department of Economics, AMA)

Reprinted from Utah Medical Bulletin—May, 1966.

Puppies and Kittens and Eye Infections

A recent suggestion in child care involves specific precautions in domestic animal care. Deworming of puppies and kittens is stressed as a necessary step before introducing the animals into a home where there are children. This precautionary measure is based on the tendency of children to pick up and swallow almost anything. In this case, children who have swallowed dirt infested with the eggs—ova—of *Toxocara canis*, the common dog roundworm, have suffered from an eye infection. One child suffered blurred vision and inflammation in one eye for more than a year. A considerable number of cases of eye involvement due to *Toxocara* now have been reported. Information available at this time suggests that infected puppies and kittens which are dewormed rarely become reinfected or transmit the disease to children or adults. Adult cats and dogs are less likely to transmit the disease. (M. J. Hogan, M. D., and others: "Visceral larva migrans and peripheral retinitis," *The Journal of the American Medical Association*, 27 December 1965).

ROY F. PERKINS, M. D. APPOINTED TO AMA STAFF

Roy F. Perkins, M. D., of Alhambra, Calif., has been named director of the American Medical Association's newly established Department of Health Care Services.

The appointment, effective July 1, 1966, was announced by F. J. L. Blasingame, M. D., executive vice president of the AMA.

The Department of Health Care Services is one of six departments of the AMA Division of Socio-Economic Activities. Division Director Charles C. Edwards, M. D., said the department will be concerned with community health services, voluntary health agencies, aging, maternal and child care, group practice, insurance and prepayment, patterns for the organization and delivery of medical care, manpower, and the business side of medical practice.

Dr. Perkins has been in the practice of internal medicine with the Alhambra Medical Clinic since 1951. He has served as Associate Clinical Professor of Medicine at Loma Linda University School of Medicine since 1950 and at the University of Southern California School of Medicine since 1964. He has been senior attending physician of the Diabetic Service at Los Angeles County Hospital and has also served in the endocrinology clinic, both at Los Angeles County Hospital and the White Memorial Hospital.

Dr. Perkins was born in Rock Island, Ill.; attended Von Steuben High School in Chicago; received his B. S. and M. D. degrees from the University of Illinois; served a two-year internship at Los Angeles County Hospital and a four-year residency at Mayo Clinic in Rochester, Minn.; received his M. S. degree in Pathology from the University of Minnesota, and is a diplomate of the American Board of Internal Medicine.

Dr. Perkins was president of the San Gabriel Valley Branch of the Los Angeles



Dr. Roy F. Perkins

County Medical Association in 1958 and is a member of the Los Angeles County, Calif., and American Medical Associations.

His other professional affiliations include the American Diabetes Association, New York Academy of Sciences, American College of Physicians, American Heart Association, American Association for Advancement of Science, and the American Society of Internal Medicine.

Dr. Perkins has been a board member of the Diabetes Association of Southern California, Alhambra Community Chest, and Alhambra Chamber of Commerce, and president of the Vega and Main-Champion corporation in Alhambra.

In 1962 Dr. Perkins served a three-month tour of duty with Project Hope in Peru. He is the author of numerous scientific articles and has done major research on diabetes.

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calming.

Stelazine[®]
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true
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Sedative or muscle relaxant-type tranquilizers are often all that's needed for patients with temporary situational anxiety. But in the many patients whose anxiety presents a continuing problem these agents are limited by their generalized dulling effects.

'Stelazine' can attack anxiety directly without producing annoying dulling effects. On 'Stelazine', patients can react more normally to day-to-day stress yet remain alert, able to carry on their normal activities.

Contraindicated in comatose or greatly depressed states due to CNS depressants and in cases of existing blood dyscrasias, bone marrow depression and pre-existing liver damage. *Principal side effects*, usually dose related, may include mild skin reaction, dry mouth, insomnia, fatigue, drowsiness, dizziness and neuromuscular (extrapyramidal) reactions. Muscular weakness, anorexia, rash, lactation and blurred vision may also be observed. Blood dyscrasias and jaundice have been extremely rare. Use with caution in patients with impaired cardiovascular systems. Before prescribing, see SK&F product Prescribing Information.



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Alabama Chapter American Academy Of General Practice

July 20-22, 1966

Parliament House Birmingham, Alabama

WEDNESDAY, JULY 20—

MORNING OF MEDICINE

Presiding: H. C. Mullins, Jr., M. D.,

President, Alabama Chapter, American
Academy of General Practice

9:00- 9:20—Call to order

9:20-10:00—"Latest Advances in Cancer Research and Treatment"—J. R. Heller, M. D., Special Consultant, National Cancer Institute, Bethesda, Maryland.

10:00-10:40—"Early Signs of Coronary Disease and Recent Aspects of Treatment"—Edward Massie, M. D., Associate Professor, Washington University School of Medicine, St. Louis, Missouri.

10:40-11:00—View Exhibits.

11:00-11:40—"Practical Office Treatment of Arthritis"—Amos Johnson, M. D., President, American Academy of General Practice, Garland, North Carolina.

11:40-12:00—Panel Discussion.

12:00- 1:00—Lunch.

1:00- 2:30—Annual Business Meeting.

2:30- 3:00—View Exhibits.

WEDNESDAY, JULY 20—

AFTERNOON OF PSYCHIATRY

Presiding: Donald Smith, M. D.,
Tuscaloosa, Alabama

3:00- 3:40—"The Psychological Aspects of Surgery: A Guide for the General Prac-

titioner"—Harry S. Abram, M. D., Assistant Professor of Psychiatry, University of Virginia Hospital, Charlottesville, Virginia.

3:40- 4:20—"Follow-up Treatment of Patients Discharged From Psychiatric Hospitals"—T. H. Patton, M. D., Bryce Hospital, Tuscaloosa, Alabama.

4:20- 4:40—Panel Discussion.

4:40—Drawing of Door Prize.

5:00- 6:00—Oyster Bar and Beer Courtesy of Marion Laboratories, Patio, Parliament House Motor Hotel.

THURSDAY, JULY 21—

MORNING OF SURGERY

Presiding: John B. Rice, Jr., M. D.,

President-Elect, Alabama Chapter,
American Academy of General Practice

8:00- 9:00—Past President's Breakfast.

9:00- 9:40—"Management of Intestinal Obstruction"—Manuel E. Lichtenstein, M. D., Professor of Surgery, Northwestern University Medical School, Chicago, Illinois.

9:40-10:20—"Gall Bladder Disease"—Philip Thorek, M. D., Clinical Professor of Surgery, University of Illinois College of Medicine, Chicago, Illinois.

10:20-10:40—View Exhibits.

10:40-11:20—"The Diagnosis and Treatment of Painful Conditions About the



after surgery

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Each capsule contains:

Vitamin B ₁ (Thiamine Mononitrate)	10 mg
Vitamin B ₂ (Riboflavin)	10 mg
Vitamin B ₆ (Pyridoxine HCl)	2 mg
Vitamin B ₁₂ Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

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Shoulder"—Jack Wickstrom, M. D., Orthopaedist-in-Chief, Division of Orthopaedics, Department of Surgery, Tulane University School of Medicine, New Orleans, Louisiana.

11:20-12:00—Panel Discussion.

12:00- 1:00—Lunch.

THURSDAY, JULY 21—

AFTERNOON OF PEDIATRICS AND OBSTETRICS & GYNECOLOGY

1:00- 1:40—"Detection of Surgical Problems in the Newborn"—Betty Ann Lowe, M. D., Southern Clinic, Texarkana, Arkansas-Texas.

1:40- 2:20—"Hearing Loss in Children"—G. O. Proud, M. D., Department of Otorhinolaryngology, University of Kansas Medical Center, Kansas City, Kansas.

2:20- 2:40—View Exhibits.

2:40- 3:20—"Geriatric Gynecology"—A b e Mickal, M. D., Professor, Department of Obstetrics and Gynecology, Louisiana State University Medical Center, New Orleans, Louisiana.

4:00- 4:20—Panel Discussion.

4:20—Drawing of Door Prize.

6:00- 7:00—Cocktail Party—P a t i o—Parliament House Motor Hotel, Courtesy of Durr Surgical Supply Company.

8:00—Annual Banquet—Crown Room—Parliament House Motor Hotel.
Speaker—Mr. Jim Martin, U. S. House of Representatives—"The South's Role in These Changing Times."

FRIDAY, JULY 22—MORNING SESSION

MEDICAL COLLEGE OF ALABAMA
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9:30-11:30—AUSCULTATION OF COMMON CARDIAC AND EXTRA CAR-

DIAC SOUNDS—Cardiovascular Department—Tom Sheffied, M. D., Course Director.

10:00-12:00—PSYCHIATRY GROUP DISCUSSIONS—Frank Nuckols, M. D., Course Director.

FRIDAY, JULY 22—AFTERNOON SESSION

1:00- 3:00—SOME PROBLEMS OF CHILDHOOD—Pediatric Department—John W. Simpson, M. D., Course Director.

1:00- 3:00—OFFICE GYNECOLOGY—Obstetrics & Gynecology Department—W. Nicholson Jones, M. D., Course Director.

1:00- 3:00—OFFICE ORTHOPEDICS—Orthopedic Department—Chestley Yelton, M. D., Course Director.



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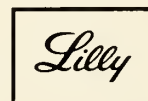
CONTRAINDICATIONS: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

SIDE-EFFECTS: Even though Ilosone is the most active oral form of erythromycin, the incidence of side-effects is low. Infrequent cases of drug idiosyncrasy, manifested by a form of intrahepatic cholestatic jaundice, have been reported. There have been no known fatal or definite residual effects. Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of patients as a result of a local stimulating action of Ilosone on the alimentary tract. Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

DOSAGE: *Children under 25 pounds*—5 mg. per pound of body weight every six hours. *Children 25 to 50 pounds*—125 mg. every six hours. *Adults and children over 50 pounds*—250 mg. every six hours. For severe infections, these dosages may be doubled.

Available in Pulvules[®], suspension, drops, and chewable tablets. Ilosone Chewable tablets should be chewed or crushed and swallowed with water.

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THE JOURNAL

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THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

July, 1966

No. 1

Neonatal Hirschsprung's Disease: An Often Delayed Diagnosis

Walter S. Cain, M. D.*

Birmingham, Alabama

Hirschsprung's Disease probably appears in 25 or more newborns annually in the State of Alabama. While uncommon, the urgency for its early recognition is signified by the high infancy mortality figures when improperly managed. These results can be bettered with an increased index of suspicion since adequate symptomatology to suggest this diagnosis is usually present during the first days of life.

Hirschsprung's disease (aganglionic megacolon) has long been identified with chronic constipation and abdominal distention. While they remain the classic manifestations, particularly in the older infant and child, it is now appreciated that the neonate and the young infant with this condition may present any one of several clinical pictures. The manner in which they appear can be quite

subtle and the infant may expire in what seems a rather mysterious fashion to the uninitiated. The significance of early diagnosis and proper management is evident when one realizes that with improper treatment⁵ the mortality rate during the early months of life is over 50 per cent.

The occurrence of this disease, while not great, is being recognized with increasing frequency. At one time it was thought to appear about once in every 30,000 births, but the figure has been repeatedly revised until it has now been reported as one in 3,000 new-

*Clinical Instructor of Pediatric Surgery, Medical College of Alabama. Attending Surgeon, The Children's Hospital of Birmingham, Alabama and University of Alabama Hospital.

borns.⁶ It is doubtful if the true incidence has increased significantly, if at all. Heightened suspicion, along with an appreciation of the distinct difference in the newborn symptomatology and a simplified method of obtaining histologic confirmation, have undoubtedly influenced this figure. In another statistical consideration, 15 to 20 per cent of all neonatal intestinal obstructions are due to this condition.

Our present understanding of this form of megacolon is the result of the cumulative work of many investigators. While the condition was reported as early as the 17th century, Hirschsprung's name became synonymous only after his classical paper in 1886. His gross description of the advanced case, with proximal dilatation and hypertrophy of the colon and an essentially normal calibered distal bowel, has not been improved. However, he erroneously considered the dilated segment as the primary site of pathology. It was not until the late 1930's and 1940's that the observations of several were combined to correctly identify the distal segment, which proved to be without ganglion cells, as the site of obstruction.⁷ With this recognition as an aganglionic form of megacolon, refinements in clinical recognition and treatment soon followed.

The aganglionosis uniformly involves the distal-most rectal wall, but the uninterrupted extent of the proximal involvement varies widely, with reaches to the small intestine in rare instances. About 85 per cent of the cases have aganglionosis limited to the confines of the mid-sigmoid colon and anus.

It is recognized that rather than the normal, efficient peristaltic activity there are uncoordinated rhythmical contractions across the aganglionic segment, and that this abnormal motility presents a form of intestinal obstruction. Regardless of the length of the bowel involved, there is often a marked variation among patients in the type, severity and time of onset of symptomatology. As yet, a clear explanation for this diversity in manifestations has not been appreciated. It is understood, however, that one should not

depend on short segment aganglionosis for relatively mild symptoms since just such an infant may follow a severe course of early onset.

A typical experience with an infant afflicted with Hirschsprung's disease is presented here.

Case Number 1

A vigorous, well-developed, male, newborn infant was the product of an uneventful gestation, labor and delivery. He had total obstipation and vomited bile stained mucus in the first 36 hours of life. A rectal examination had then resulted in a profuse expulsion of liquid meconium and gas. Subsequently, stool passed normally, vomiting ceased, and formula was accepted well.

At six days of age, he expelled an excessive number of loose blood-stained stools. Stool cultures were normal. In spite of a change in formula, diarrhea persisted and vomiting recurred. Intravenous fluid and electrolyte replacements were necessary. Insidiously, the abdomen distended and a complete cessation of bowel movements followed. An irrigation enema evacuated a firm stool. A barium enema at 11 days of age revealed a dilated, redundant colon and changes compatible with a severe non-specific colitis. Alternating periods of diarrhea and constipation occurred before a final episode of hourly evacuations of loose stool, fever, lethargy and dehydration appeared.

A repeat barium enema when 21 days old revealed a transitional zone in the distal sigmoid colon characteristic of Hirschsprung's disease as well as severe ulcerative changes of the rectum and colon. A sigmoid colostomy was performed after fluid and electrolyte replacements. A tissue specimen taken at that time confirmed the severe colitis and absence of ganglion cells. The infant has since thrived while waiting optimal weight and developmental changes for a definitive operation for his disease.

The urgency of early recognition and proper management is emphasized in the following case.

Case Number 2

This apparently normal six pound, 12 ounce male neonate was the product of an uncomplicated pregnancy, labor and delivery. With the first attempts at feeding, vomiting of bile-stained gastric contents occurred. No meconium stools were passed on the first day of life and there was early, progressive abdominal distention.

At 30 hours, a rectal examination demonstrated meconium in the rectum with little being expelled. A saline enema was slightly more productive. Flat and upright plain X-rays of the abdomen revealed meconium in the sigmoid colon and gaseous distention of both the small and large intestine with no fluid levels. In spite of the persisting distention, it was chosen to delay contrast enema studies overnight.

The infant expired in apparent respiratory distress during the night at 36 hours of age. Post-mortem examination revealed gross pneumo-peritoneum and peritonitis from a wide perforation of the cecum. The colon was distended to the sigmoid area where aganglionosis of the distal bowel began.

The masquerade in which the disease may manifest itself is demonstrated in this history.

Case Number 3

A female infant weighing seven pounds, 11 ounces was the product of a full-term, uncomplicated pregnancy and normal delivery. She had been considered completely well for the first three weeks of life except for mild spitting during the first day of life. When started on cereals at three weeks of age, she began to vomit and pass loose stools frequently. A medical impression at that time was gastroenteritis or possibly an allergy to food, and she was not judged to be very ill. Her diet was changed to a soybean preparation and there was a clearance of symptoms. One week later she was replaced on cereals with a gradual return of vomiting and diarrhea. The infant's abdomen then became distended after which soft brown bowel movements appeared.

On hospitalization at six weeks of age, she was found to be severely dehydrated and acutely ill with weak respirations and a grossly distended tympanitic abdomen. Rectal examination was followed by the passage of soft stool and gas with the subsequent relief of the distention. Nasogastric suction was productive of a large amount of bilious drainage. An acute episode of severe diarrhea aggravated an already present state of hyponatremic acidosis, and the infant expired on the second day of hospitalization without a diagnosis. Post-mortem examination revealed an absence of ganglion cells from the recto-sigmoid junction distalward and severe changes of enterocolitis as well as a site of gross transition in distal bowel size.

Several thorough investigations have documented the appearance of symptoms during the first day of life in 70 to 80 per cent of the afflicted patients.¹² Another ten per cent have been asymptomatic at the end of two months, while only two per cent remain to demonstrate initial clinical evidence after the first year of life. Thus, the disease is primarily one of infancy, particularly the newborn period.

The most common initial symptom is a delay in the passage of meconium with or without additional findings of intestinal obstruction. Bodian, et. al., reported that 92 per cent of all normal full-term neonates spontaneously expel meconium within 24 hours of birth. The inability to meet this deadline, as well as a noticeable sluggishness of the total evacuation of meconium, is considered enough suggestive evidence to warrant a diagnostic workup. The premature, who rather characteristically has slow expulsion of meconium, may represent an exception and deserves special consideration with further scrutiny.

Several frequently associated symptoms are quite non-specific, and when taken out of the context of the history, they may seem unrelated. Reluctance to feed, with or without vomiting, may appear with an equally subtle appearing picture of partial intestinal

obstruction. Initially, some of these cases have been classified as "feeding problems" or "failure to thrive" cases.

Diarrhea, a frequent part of the clinical picture in Hirschsprung's disease, has contributed a great deal of the deception to the diagnosis. It may result in part from a non-bacterial colitis or a simple overflow of liquid stool past a fecal impaction. In the latter instance, it can alternate with periods of constipation. When diarrhea is the dominant, or even isolated manifestation, the maximum of suspicion is required for prompt detection. Some cases are now being identified on the infectious disease wards where they were initially placed for gastroenteritis.

Physically, the infant with aganglionic megacolon usually appears quite normal, often robust, at birth and without congenital anomalies. Abdominal distention may appear early and must be differentiated from other types of distal bowel obstruction such as meconium ileus, atresias, imperforate anus, etc. At varying speeds, the patient will usually acquire the characteristic "pot-belly" and thin extremities with minimal subcutaneous tissue. The neonates with severe symptomatology have exhibited these changes rather rapidly. On the other hand, the infant who has received daily aid in the evacuation of his bowel with enemas may never acquire this typical habitus.

The rectal examination is usually diagnostically significant. The internal sphincter may have an increased resistance, but more commonly has a normal tone. The ampulla is empty and if the aganglionic segment is short, the dilated and possibly impaction-filled ganglionic segment of bowel can be reached with the examining finger. Very suggestive of Hirschsprung's disease is the explosive expulsion of meconium and gas on removal of the examining finger. This event can be followed by a relief of symptoms for varying periods and leave one with a false sense of security.

Occasionally, there is an initial evacuation of a meconium plug following the digital examination or enema. While a "meconium

plug syndrome" has been recognized as an isolated cause of intestinal obstruction, such a plug may also be a part of the clinical picture of aganglionic megacolon.³ Thus, a neonate presenting such a bolus should be carefully evaluated both before and after discharge from the hospital.

Plain roentgen studies of the abdomen may suggest Hirschsprung's disease early in life. The presence of dilated gas and fluid-filled loops of colon as well as "tiny calibered, air-containing rectum" is compatible with this diagnosis.⁸ Unfortunately, in the newborn one cannot be sure whether the dilated bowel is large or small intestine.

Contrast enema studies are of much greater significance but cannot replace histologic diagnosis for final confirmation. Characteristically, a "transition zone" is demonstrable between the proximal distended and the distal aganglionic, "narrow" bowel. While the distal segment may be small, this is not always true as it has been larger than normal on occasion. In a significant number of neonates, the contrast in size between the respective areas of bowel is slow to develop and may require several weeks before becoming roentgenologically demonstrable. On the other hand, this sign has often been present on the first day of life. The prolonged retention of the media also insinuates this diagnosis.

Several additional considerations should be appreciated by anyone concerned with the radiologic identification of Hirschsprung's disease. A water soluble, radio-opaque media such as propyliodone (Dionosil) is preferable to barium, which on retention may become inspissated. Mechanical evacuation and decompression of the bowel prior to X-ray should be avoided inasmuch as the "transition zone" can be more difficult to ascertain, particularly in the neonatal cases. In the presence of short segments of aganglionosis, (15 per cent of all cases) with a dilated, redundant sigmoid colon, there is a chance of obscuring the "transition zone" on the postero-anterior views. For this reason, all such studies should include lateral or oblique

KEYS TO DIAGNOSING NEONATAL HIRSCHSPRUNG'S DISEASE

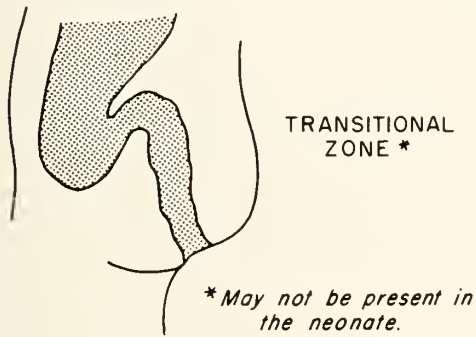
I. NEONATAL SYMPTOMS

Meconium Retention
Poor Intake
Vomiting
Diarrhea

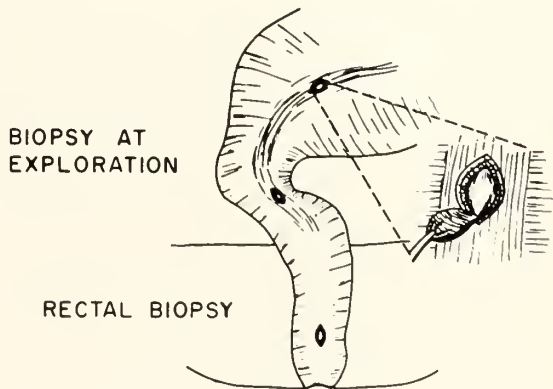
II. SIGNS

Abdominal Distention
Weight Loss
Rectal Examination
Empty Ampulla
Explosive Expulsion

III. CONTRAST ENEMA EXAMINATION



IV. HISTOLOGIC CONFIRMATION WITH MUSCLE BIOPSY



views to avoid misinterpretation, and a negative report should not be submitted without them.

The final diagnosis rests with the absence of ganglion cells in the submucosal and intramuscular plexuses of the distal intestine. Such a biopsy can be obtained from the rectal musculature at a site above the internal sphincter (three centimeters proximal to the muco-cutaneous junction.)¹¹ However, should the aganglionic segment extend above the peritoneal reflection, a similar tissue specimen may be obtained at laparotomy. Experience indicates that frozen section diagnosis is quite difficult in Hirschsprung's disease and should be relied on only when it has been interpreted by a pathologist ex-

perienced in this endeavor. Recent work by Smith emphasizes the necessity of a full understanding of the maturation of the intestinal ganglion cells in such an interpretation.⁹

Two complications have significantly contributed to the mortality and morbidity figures. Perforations of the rectum or sigmoid colon may result from the injudicious introduction of a rectal tube for either decompression or diagnostic purposes. The distal, relatively unused aganglionic bowel is often quite thin and vulnerable to this complication. Spontaneous perforation, usually of the newborn cecum, is apparently the result of excessive distention. With all infant colonic perforations of undetermined etiology, the

diagnosis of aganglionic megacolon should be entertained until proven otherwise by histologic studies.

Enterocolitis has proven to be the greatest cause of death related to Hirschsprung's disease. Bill found that about one-half of his patients with aganglionic megacolon exhibited evidence of this complication, and of this group one-third expired as a consequence.¹ The condition is apparently secondary to the distal, partial, mechanical obstruction and is non-bacterial in etiology. The most severe manifestations seem to be experienced during the newborn period where the disease has been seen to run its full course in a day.

Several symptoms, all of which are not present in every case, characterize enterocolitis: foul-smelling, watery stools; abdominal distention; fever; vomiting and dehydration. When a compromised ability to pass stool has been previously recognized, the diagnosis should present little difficulty. Unfortunately, the relationship is not always clear and the diagnosis may be obscure. Contrast enemas of the colon will demonstrate changes of irritation, often with ulcerations. An erroneous impression in such a situation has been chronic idiopathic ulcerative colitis, a very unusual lesion of infancy.

The clinical course exhibited by individual cases of Hirschsprung's disease vary significantly. Although the patterns are not clearly defined, they may be generally classified by the following: (a) Persistent absence of spontaneous stool elimination from birth with signs of obstruction, (b) Initial assisted mechanical evacuation of meconium followed by varying degrees and periods of sluggishness in stooling, (c) Early asymptomatic period of days or weeks with an insidious or acute onset of constipation with or without the diarrhea, and (d) Combination of (a), (b), or (c) with the complication of enterocolitis or perforation.

The management of necessity must be adapted to the specific situation; however, the principles of prompt decompression and relief of the distal obstruction seem applicable

to all cases. Ideally, on suspicion of Hirschsprung's disease, a contrast enema is performed both to confirm the impression and eliminate several obvious causes of distal obstruction, such as atresia, meconium ileus (both of which exhibit microcolons) and meconium plug. A rectal biopsy is then carried out to establish the diagnosis with certainty before intervening surgically. While this is usually feasible in the older infant, it is often not in the newly born. Many neonates are in acute need of decompression whether it be from marked distention or enterocolitis. "Conservative" measures may not relieve these problems. A rectal biopsy can be a difficult procedure technically in this age group and places significant additional stress on the ill infant. Dependable frozen section reports are available in only a few locations, and a wait for the more reliable permanent sections adds at least a 24 hour delay. Thus, in selected situations, a colostomy is established prior to biopsy confirmation realizing that the assumed diagnosis may be incorrect in a small percentage of the cases. However, a definitive resection of the aganglionic bowel should not be considered at any age without microscopic proof of the diagnosis.

At present, the following steps in management are recommended. On suspicion of neonatal Hirschsprung's disease, oral intake is discontinued and any fluid and electrolyte deficit is replaced intravenously. A contrast enema roentgenogram is obtained promptly. Should the findings add support to the suspected diagnosis on the basis of a "transition zone" or absence of evidence of another condition, an effort should be made to conservatively relieve the acute symptoms. They are usually secondary to the distal obstruction and present as abdominal distention or signs of enterocolitis or both. Relief may be obtained by the passage of a nasogastric tube which is left to gravity drainage and isotonic saline enemas. The latter are performed by the careful insertion of a large calibered (24 Fr.) rectal tube, as far as the lumen of the dilated bowel, when possible. Warm isotonic saline is gently instilled and then re-

moved in total (to avoid water intoxication) until the irrigations have accomplished decompression or failure of this treatment is recognized. In the former case, repeated efforts at separate sittings may be necessary for continued deflation. A rectal biopsy is then performed when the infant is in a more stable state and colostomy is carried out on confirmation of the diagnosis.

Where irrigations are unsuccessful, a diverting colostomy is established immediately using a suture technique previously described.² The site selected for the stoma should be in the distal, dilated, normally innervated bowel. To confirm the presence of ganglion cells, a biopsy should be taken at this location. A second muscle biopsy is obtained from the more distal, non-dilated segment, should it extend above the peritoneal reflection, to confirm the diagnosis. Immediate frozen section confirmation is de-

sired for properly locating the colostomy in the ganglionic bowel, but permanent studies are more reliable.

At present, it is considered preferable to delay the definitive procedure until the infant is thriving and has reached 20 pounds of weight. In 1948 Swenson suggested the total removal of the aganglionic segment and replacement with normal bowel using an abdominoperineal pull-through procedure which he described. While using the same basic principle of replacing the functionless segment, several additional procedures and modifications have since been introduced to overcome certain technical and functional problems associated with the still widely used initial operation. It remains to be seen which, if any of these, will give completely satisfactory results. Today, the mortality rate associated with the definitive operation should be less than two per cent.

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The 'Modern' Management of Primary Gout*

Gene V. Ball, M. D.**

Birmingham, Alabama

1. Diagnosis

The recognition of a disease is clearly of central importance in its management. There have been 'modern' advances to aid in the diagnosis of gout as noteworthy as the continually evolving therapeutic measures. The clinical diagnosis of gout may be treacherous, and dependence upon colchicine therapy as a diagnostic test for gout may also lead to error. A few gouty patients, especially those with tophaceous gout and those with well established attacks may not respond in a 'diagnostic fashion' to colchicine.¹ Overreliance upon a serum uric acid value as an indicator of gout is unwise: there has been ample documentation of gouty arthritis associated with normal uric acid values, and conversely hyperuricemia occurs in the absence of gout.²

McCarty and Seegmiller in particular have made unusually significant contributions to clinical medicine in defining the importance of urate crystals in gouty effusions.^{3, 4, 5} The work done by these investigators has enabled us to diagnose gout with far greater confidence and it also has been at the heart of the formulation of our current concept of the pathogenesis of the acute inflammatory process in gout. Fluid from the gouty joint contains increased numbers of white cells, and

extra- and intracellular urate crystals. The urate crystals are negatively birefringent. Calcium pyrophosphate and cholesterol crystals are also seen occasionally in joint fluids.⁴ Microscopic examination of joint fluid does not require centrifugation of the fluid: a drop is placed on a slide and covered with a cover slip.

Urate crystals may persist in joint fluid *in vivo* for up to three months,⁴ and in one of our samples of gouty fluid stored at room temperature, these crystals have been seen in large numbers for as long as seven days after the fluid was obtained. The number of crystals decreased slowly, and by the tenth day crystals could no longer be seen.

2. Treatment of the Acute Attack

Having established the diagnosis of gout by consideration of the history, the physical findings and the demonstration of increased numbers of white cells and urate crystals in the joint fluid, one then considers treatment. For the immediate relief of pain, narcotic analgesics might well be used. In general, it will not be necessary to administer the narcotics more than once, especially if more specific therapy is begun at the same time. In the W. Paul Holbrook Memorial Lecture on 'The Treatment of Primary Gout, the Present Status', Gutman stated: "I think the time has come to dispossess colchicine as the traditional drug of choice in the treatment of acute gouty arthritis, a proposal already suggested by others."⁶ Gutman, Kuzell and others have used phenylbutazone and oxyphenbutazone preferentially.^{6, 7}

Our experience with these drugs has been

*This investigation was supported by Public Health Service grants T1 AM 5000 and AM 03555 from the National Institute of Arthritis and Metabolic Diseases and Merck Sharp and Dohme, West Point, Pennsylvania.

**From the Division of Rheumatic Diseases, Department of Medicine, University of Alabama Medical Center, Birmingham, Alabama.

favorable. Given in a dose of 400 to 600 milligrams stat, phenylbutazone is usually free from toxic effects and often this amount of the drug will alleviate discomfort and initiate disappearance of inflammation. The same dose can be repeated within 12 hours if necessary and during the ensuing 24 hours one tablet (100 milligrams) every eight hours might be given. It is often desirable to begin concurrent colchicine treatment, which will be continued as prophylaxis, in a dose of one tablet (0.6 or 0.5 mg) b. i. d. or t. i. d., as indicated. Patients who have experienced both traditional colchicine therapy of acute gout and phenylbutazone therapy of acute gout may insist to a new physician, e. g., in the setting of a teaching hospital, that they not be given colchicine. Indomethacin has been used in both this country and abroad in the treatment of acute gout and some rheumatologists consider this the current drug of choice.^{8, 9} Indomethacin is a non-steroidal, mildly analgesic, antipyretic derivative of methylindole-acetic acid. It is currently being used in the treatment of rheumatoid arthritis, rheumatoid spondylitis, osteoarthritis, and gout. Indomethacin, like colchicine, has no uricosuric effect. In the treatment of an acute attack of gout, indomethacin may be given in amounts which would not be tolerated in the treatment of more chronic conditions. The incidence of side effects in the dosage schedule which we and others have employed in the treatment of acute gout has been low. We have given four to five capsules of 25 mg each followed by two capsules every eight hours for two-three days. An active peptic ulcer is considered an absolute contraindication to the use of indomethacin and phenylbutazone: both are ulcerogenic. The response to indomethacin can be most dramatic. In our series of nine patients treated within the past two months, four experienced complete relief from pain within two to four hours, and all had a good response (disappearance of pain and objective improvement in less than 24 hours). Again, it is probably important to begin colchicine

simultaneously in those patients who will be on prophylactic therapy.

3. The Intercritical Period and Uricosurics

The management of the intercritical period is no problem in most patients. Colchicine prophylaxis is economical, well tolerated and effective in the majority of patients.¹⁻⁶ We counsel our patients to increase the colchicine on their own at the first sign of an acute gouty attack and by taking one tablet every hour or two in a total dose of five or six tablets, patients have found they can abort the developing arthritis with no drug toxicity. This has been worthwhile in clinic and private patients.

The use of urate diuretics is more controversial. The appearance of tophi is taken as an indication for the use of these drugs by most authorities; persistent hyperuricemia, that is serum uric acids in the range of eight milligrams or more, frequent episodes of gout or a progressive form of the disease are also considered indications for the use of probenecid, 0.5 gram-2.0 gram daily, or sulfinpyrazine, 100-400 mgm daily. It has been shown that uricosurics can alter the appearance of tophi;¹⁰ however, the question of beneficial effect on kidney function remains unanswered. Gutman states that inasmuch as uric acid precipitates in the collection ducts and in the distal tubules, no improvement in kidney function can be anticipated.¹¹ The beneficial effects of uricosurics may in part stem from the physician's necessary emphasis on the ingestion of large amounts of water daily.¹² The effectiveness of the uricosurics may be limited by intolerance, concomitant salicylate ingestion, the presence of renal damage, and the over-excretion of uric acid. Since the issue of over-excretion of uric acid is important, it is our opinion that all patients with gout should have 24-hour urine uric acid determinations done while he or she is on a low purine intake and before uricosurics have been begun if possible. Given a urine excretion of 800 mgs or more of uric acid in 24 hours, one might well wish to insist on large amounts of daily fluid

(three liters or so) and also attempt to alkalinize the urine. Alkalinization of the urine may be difficult and may obviously be contraindicated in patients with congestive heart failure or calcium stones in the urinary tract; however, its possible beneficial effects can best be appreciated by considering the solubilities of uric acid. At pH 5 in the urine, uric acid solubility is 15 mgs/100 ml; at pH 7, the urine uric acid solubility increases to 200 mgs/100 ml.¹³ Acetazolamide, in a dose of one tablet (250 mgs) at night or every eight hours and sodium bicarbonate in amounts up to ten or 15 grams daily may be necessary to insure an alkaline reaction, as checked with nitrazine paper, in all urine specimens. Urate calculi may be reabsorbed with this regimen of high fluid intake and alkali therapy.

4. The Xanthine Oxidase Inhibitors

The more severe form of primary tophaceous gout may be quite resistant to prophylaxis and urate diuretics. A low purine diet is of limited value:¹⁴ and this disease may be associated rarely with premature renal failure and a grave prognosis. The advent of xanthine oxidase inhibitors brightens the outlook considerably. These drugs are still for investigational use only. Under the influence of allopurinol the serum and urine uric acids decrease. The precursors hypoxanthine and xanthine increase from a total of about 16 mgs per 24 hour urine specimen to 80-100 mgs per 24 hour urine specimen.¹⁵ In general, one can anticipate on a dose of 300 milligrams of allopurinol daily a variable decrease in the serum uric acid and a decrease in urine uric acid by about 50 per cent, e. g., a decrease from 800 to 400 milligrams per 24 hour urine specimen. The oxypurines, i. e., hypoxanthine and xanthine, are cleared rapidly in the urine so that plasma concentration of these compounds is usually not high enough to be of clinical significance.¹³ Xanthine stones secondary to the use of this drug have not been reported. An occasional patient will experience an in-

crease in the number of acute attacks of gout on allopurinol and rarely these attacks become frequent enough to obviate continuation of this drug.¹⁵ In general, though, the additional use of colchicine will prevent attacks and colchicine should be continued until tophus mobilization has been complete or homeostasis has been attained. Side effects from the use of allopurinol are uncommon.

It may be advisable to add a uricosuric to the above regimen at least until "Homeostasis" is achieved.

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Presidents of Societies in those counties not listed are urged to appoint a member to this important office without delay so that they can begin receiving essential information concerning legislation at the state and national levels.

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Geneva—Dr. H. A. Childs.....	Broad at English Street Samson
Greene—Dr. J. J. Bethany, Jr.....	Eutaw
Hale—Dr. D. R. Ramey, Jr.....	Greensboro
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Jefferson—Dr. Frank Trucks.....	5502 First Ave., N. Birmingham
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Lawrence—Dr. J. P. Dyar.....	Moulton
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Lowndes—Dr. R. P. Griffin.....	P. O. Drawer N. Ft. Deposit
Marengo—Dr. F. S. Whitfield, Jr.....	Demopolis
Marshall—Dr. Joe D. Bonds.....	211 S. Broad St. Albertville
Mobile—Dr. Walter Hogan.....	2152 Airport Blvd. Mobile
Monroe—Dr. F. E. Nicholas.....	Monroeville
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Morgan—Dr. T. K. Lewis, Jr.....	1121 Somerville Rd. Decatur
Perry—Dr. A. F. Wilkerson.....	Marion
Pickens—Dr. William Hill.....	Carrollton
Pike—Dr. J. A. Brantley.....	Troy
Russell—Dr. J. S. Mitchell, Jr.....	1400 Broad St. Phenix City
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in diarrhea

LOMOTIL[®]
Tablets
Liquid

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride 2.5 mg.

(Warning: May be habit forming)

atropine sulfate 0.025 mg.



is a corker

Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- **Ulcerative colitis**
- **Acute infections**
- **Irritable bowel**
- **Regional enteritis**
- **Drug therapy**
- **Food Poisoning**
- **Functional hypermotility**
- **Malabsorption syndrome**
- **Ileostomy**
- **Gastroenteritis and colitis**

Dosage: For full therapeutic effect—Rx full therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: 3 to 6 months — 3 mg. (½ tsp.* t.i.d.)
6 to 12 months — 4 mg. (½ tsp. q.i.d.)
1 to 2 years — 5 mg. (½ tsp. 5 times daily)
2 to 5 years — 6 mg. (1 tsp. t.i.d.)
5 to 8 years — 8 mg. (1 tsp. q.i.d.)
8 to 12 years — 10 mg. (1 tsp. 5 times daily)

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily)

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the therapeutic dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE

Research in the Service of Medicine

THE PROFESSIONS HAVE A COMMON BOND

By J. Edward Thornton

Mobile, Alabama

When I entered law school several years ago, the Dean welcomed us by telling us:

"Young men, you are beginning a career in one of the oldest professions. This means that you are going to lead a life of service. If you want for yourself money or power or influence, you have come to the wrong school. This school prepares young men to serve others.

"Your lives are going to be taken up with other people's problems and troubles, their dreams and aspirations, their disappointments and defeats. You will spend your time counseling and advising those who seek you out.

"In order to engage in so intimate a relationship, you must have skill in the tools of your profession, which is what this School will endeavor to supply. You also will need a heart as well as a head. To insure your fulfillment of the responsibilities inherent in this profession, you will be hedged about by standards, traditions and customs older than this Nation. Unless you can subject yourselves to the disciplines of this ancient and honored profession and unless this life of service in other's causes is a stimulating challenge to you, then you are in the wrong school, you are headed in the wrong direction, and you can look forward to a life of frustration, irritation and unhappiness."

I have spent my life verifying these observations.

Though these words were addressed to law students, they were and are equally applicable to medical students. Physicians are members of a profession, and this sets you apart from other trades and vocations, for

there is inherent in this concept of a profession the skilled service to others.

In these days of Socialism, with State hospitals, State schools, State welfare, State post offices, and the like, the content of the professions is being drained off. The cliché which irritates me most today is the constantly repeated statement that the lawyers and doctors have a "closed shop" to protect themselves from cut-throat competition. From this premise, it is argued that since the State protects lawyers and doctors from unlimited competition, therefore, the State should protect the butcher, the baker and the candle-stick maker with a "closed shop" imposed with State sanctions to eliminate "free-riders." And what irritates me almost as much as these pronouncements is the fact that we who best know that this is fundamentally wrong, sit idly by and say nothing to expose the fallacy of these assertions. I would that I could clarify the nature of professions so that this lie could be forever banished.

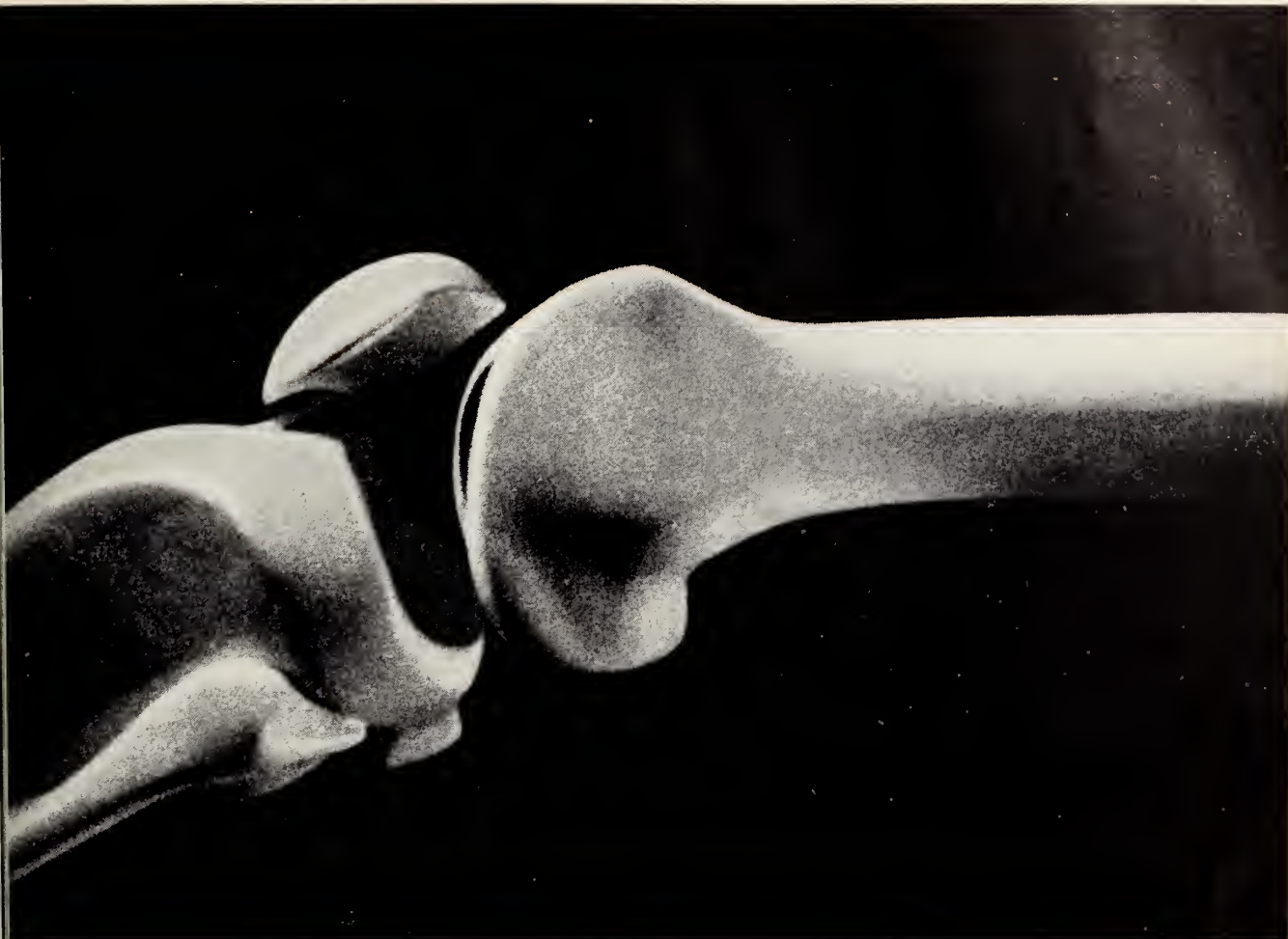
The best description I know of a profession is that it is a group engaged in a common calling, as a learned art, in the public interest, and nonetheless public because it is a means of livelihood.

In the first place, professions, all professions, whether the ministry, teaching, law, medicine, or any of the other professions, are engaged in service. It is service which sets the professions apart from other vocations or avocations. And this service is to others.

In the next place, a profession is a calling. The call may not be as clear for law or medicine as it is for the ministry, but it is a very definite and clear-cut calling. I remember with such dismay, hearing a young man several years ago tell me that he was going

(Continued on Page 56)

Delivered to the Annual Convention of The Alabama Medical Society at Montgomery, Alabama, on April 24, 1964.



Butazolidin® alka Usually works within 3 to 4 days in osteoarthritis

phenylbutazone	100 mg.
colloidal aluminum hydroxide gel	100 mg.
magnesium trisilicate	150 mg.
atropine	
ethylbromide	1.25 mg.

The trial period need not exceed 1 week. In contrast, the recommended trial period for phenothiazine is at least 1 month.

That's why it's logical to start therapy with Butazolidin alka—you'll know quickly whether or not it works. And usually, it will.

A large number of investigators have reported major improvement in about 75% of cases. Some patients have gone into remission. Relief of stiffness and pain may be followed quickly by improved function and resolution of other signs of inflammation. And Butazolidin alka is well tolerated, especially since it contains antacids and an antispasmodic to minimize gastric upset.

Contraindications

Edema, danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is sedated, or when other potent drugs are given concurrently. Large doses are contraindicated in patients with glaucoma.

Precautions

Obtain a detailed history and a complete physical and laboratory examination, includ-

ing a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Make regular blood counts. Use greater care in the elderly.

Warning

If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonyleurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy.

Adverse Reactions

The most common are nausea, edema and drug rash. Hemodilution may cause moderate fall in red cell count. The drug may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss

have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Dosage

The initial daily dosage in adults is 300-600 mg. daily in divided doses. In most instances, 400 mg. daily is sufficient. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

Also available: Butazolidin®, brand of phenylbutazone
Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
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Geigy

(Continued from Page 54)

to become a dentist because he could not get into a medical school. He was working in a restaurant in Mobile and my wife and I saw him every Sunday when we went to the restaurant for Sunday dinner. We got to know him and conversed with him casually every week. Then one week he told us he was leaving to go to school in Florida to study dentistry. That seemed a laudable ambition and I congratulated him on his selecting this profession. But he drew me up short with the statement that he was not really interested in becoming a dentist. He was going into this calling because he had failed to get into the Medical School of the University of Alabama. I asked him if he wanted to be a physician. He replied that he was not particularly interested in becoming a doctor, but that he had chosen medicine because he could make more money there than anywhere else; and since he could not get in medicine he could take dentistry because of the money he could make there. I thought what a fool he was. All he could do was to fail on all counts. Since he was not really interested in serving anyone but himself, he was doomed to failure and unhappiness in any profession. And unless he was called to a life of service, he would do himself and his patients a disservice.

This is as true in law as it is in medicine. If a young man is not called to the law, he will never make a success of his life, no matter how clever or how smart he may be. It is because of this that I hesitate to urge law as a career to a young person. I certainly am anxious for our attractive, ambitious and fine young people to select law for a profession. If a young person is called to serve others in the field of law, nothing can be finer for the person or the profession. On the other hand, if he has no call to serve the law, he should never try it. As the Dean told us, I can guarantee him misery and un-

(Continued on Page 58)

Bamadex[®] Sequels[®]

Contraindications: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised; especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of pre-existing symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dose—operation of motor vehicles, machinery or other activity requiring alertness should be avoided. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia, the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor, and respiratory collapse.



**First aid for a
button popper**



**Second aid for a
button popper**

Bamadex[®] Sequels[®]

d-amphetamine sulfate (15 mg.)
and meprobamate (300 mg.)

Sustained Release Capsules

By providing combined anorexigenic-tranquilizing action, BAMADEX SEQUELS Capsules help your nonshrinking patients to establish new patterns of eating less. The amphetamine component suppresses the appetite, while the meprobamate helps allay nervousness and tension. And for most patients, the *sustained* release of the active ingredients makes possible convenient one-capsule-a-day dosage.

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**Lessens motility,
reduces secretions and
maintains mild sedation
in the ulcer patient**



ANTROCOL®

**ANTISPASMODIC
ANTISECRETORY
SEDATIVE**

Each tablet or capsule contains Atropine sulfate 0.324 mg. Phenobarbital 16 mg. Warning, may be habit forming. *Ben-sulfoid 65 mg. *See White Sec. P.D.R. p. 851.

INDICATIONS: Peptic ulcer. Functional digestive disturbances.

DOSAGE: In peptic ulcer 4 to 8 tablets or capsules per day. Dryness of mouth is a guide to proper dosage in acute ulcer. As the ulcer heals, increased sedation is an indicator to reduce dosage. In functional digestive disturbances, 1 tablet or capsule every six hours maintains sedation at the threshold of calmness. The mild antisecretory action does not disturb the average patient.

SIDE-EFFECTS: Dryness of mouth, blurred vision and difficult urination.

PRECAUTIONS: Use cautiously in prostatic hypertrophy. Do not use in glaucoma.

*Tablets packaged in bottles of
100, 500 and 5000*

*Capsules packaged in bottles of
100, 500 and 1000*

WM. P. POYTHRESS & CO., INC.

RICHMOND, VIRGINIA

Manufacturers of ethical pharmaceuticals since 1856

THE PROFESSIONS HAVE A COMMON BOND

(Continued from Page 56)

happiness if he enters law without a call for it.

Then, law is an art as contrasted to a science. A science has been defined as being a branch of study concerned with the observation and classification of facts with the establishment of verifiable general laws chiefly by induction and hypotheses. It is the "verifiable general laws" which differentiates the sciences from the arts. Cause and effect are invariable in a science, and independent of the observer or the subject.

An art is skill in performance, acquired by experience, study or observation, and cause and effect are not invariable but are dependent on the observer and the subject.

Law deals in, with, and on human personality. Human personality is not yet the subject of a science. Hence, law is an art,—a skill—rather than a science.

Interestingly enough, the practice of medicine is also an art. I realize how much the members of your profession, particularly some of the younger members think you are scientists. They think that the cause and effect rule has become invariable. One pain plus one pill equals well being. Or one nervous tic plus one tranquilizer equals steady nerves.

As much as you would like for this to be so, the simple fact is we are not there,—at least, not yet. Unless and until you abandon placebos, medicine will not be a science. But I understand the placebos are actually increasing. Berton Roueche wrote in *The New Yorker* a little while ago:

"The most widely used drugs in the modern medicine cabinet are not really drugs at all. They are merely accommodations. This is not to say that they are ineffective. Their use is often followed by incontestably salubrious results. They are, however, chemotherapeutically inert. Like that of the witch doctor's mask, the potentate's touch, and the food

faddists yeast and Yoghurt, it exists only in the receptive mind of the beholder. Such drugs are called placebos."

Physical pain as well as mental anguish, are amenable to placebo therapy. Placebos have been substituted for aspirin to cure even migraine. They work wonderfully for sleeping pills. Of course, environment has an important bearing on the result. A placebo administered in a hospital, where the patient is surrounded by symbols of authority and care, is more likely to have an effect than one taken by someone alone at home. But most important is the one prescribing. If a doctor administers the placebo, the results are almost certain.

The article concludes:

"The nature of the neural alchemy that enables the credulous mind to transmute illusion into reality remains very largely obscure. Its significance, however, seems clear enough. It indicates that medicine despite a century of scientific progress, is still an art."

These arts, however, are learned by nature. Flag-pole sitting may be an art, but it could never be called learned. Law and Medicine are. In fact, the technical training in these two fields may be getting out of hand. The pressure is increasing to make the study of law four years. I have forgotten how many years you study to become a doctor, but I know it takes years. The number of these years is increasing to the point that by the time a professional man is ready to begin his practice, he is no longer a young man. This cannot be wrong, for training never hurts a member of a profession. But it is discouraging for a young person to be faced with such an interminable period of study before he can become self-supporting.

It is the public service aspect of the professions which distinguishes them from non-professions. There are many groups engaged in rendering services to others which do not qualify as professions, such as investment counselors, social welfare workers, and the like. Not only must the service be rendered

to the public, but the service must be for the public welfare. Service rendered for the sole benefit of the practitioner or for the patient or client is not enough. The profession carries within itself an obligation of service to the public. It is this which makes it a profession.

To further clarify the obligation of the professions to the public, and sharpen the issue which distinguishes lawyers and doctors from trade unions, it may be well to point out what are not contained in this obligation of the professions to the public. In the first place, service in state operated activities is not what is meant. In other words, service by lawyers or doctors in the legislative or executive branch of government is not this public service, as laudable as it may be. We see young lawyers constantly running for public elective office. Any lawyer becomes a better lawyer for having had such experience. Doctors would do well to enter more actively into the government service, whether as elected officials, or appointed to State owned and operated hospitals or clinics. But this is an individual contribution, largely for the benefit of the applicant. The public service of the profession is not for the benefit of the practitioner, but for the public generally. And no matter how loud the legislator proclaims that he is going into politics for the benefit of the public, we know better. He is going into politics for the prestige or power his position gives him. No, this is not the public service which characterizes the professions.

Nor does service on public bodies such as the community chest or the heart or cancer drive satisfy this requirement for a profession. This service, too, is important and needed. And it needs the talents of lawyers and doctors. But this obligation of service is one for all people and professions. This is one of the prices we pay for living in a humane society. But it is not the service which distinguishes the professions from the non-professions.

Help for the indigent and needy is not this

(Continued on Next Page)

(Continued from Page 59)

obligation. Certainly the professions are obligated to these people. No one can properly be turned down by a member of a profession for want of the ability to pay. Of course, charity clinics and legal aid are more than a privilege; they are an obligation. But this is not the service limited to the professions, nor is it the public service which distinguishes professions from other groups.

The trade union, the Chamber of Commerce, the business organizations are set up for the benefit of their members. The trade unions demand the right to strike and inflict other damage on society for the welfare of their members. The carriers demand the right to shut down their operations to further the aims of the members of the association. It is this sort of self interest which is foreign to the obligation to the public held by the professions.

I will illustrate this with an occurrence in the Bar Association with which you may be familiar. Through a seemingly innocuous amendment of the divorce laws of this State a few years ago, a divorce for desertion could be granted when the deserted party filed suit after residence in this State of one year "except when the Court has jurisdiction of both parties." This exception was construed by some to mean that if both parties were present in court in person or by consent, the one year delay was not required. The result of this construction was the deluge of divorces which required the creation of special courts to serve the applicants. But the temptation for more and more cases grew too great. The "consents" came too frequently and ultimately became fraudulent and fictitious. The result was that we were overwhelmed by divorces from outside the State. More than 17,000 divorces were granted in this State in one year.

Complaints began to be made from more and more places. At last, the Bar Association could no longer ignore them. Something had to be done.

The Chairman of the Grievance Committee

of the State Bar was Robert Steiner of Montgomery, one of the brightest and ablest young lawyers in the State. He also has one of the most lucrative practices in the State, being the third generation in his family practicing in his firm.

He took off from his private practice to investigate these complaints. He found widespread fraud and corruption in a specially created court for divorces in Geneva County in this State. The results of his investigation were presented to the Grievance Committee. Prosecutions were commenced, and trials were had.

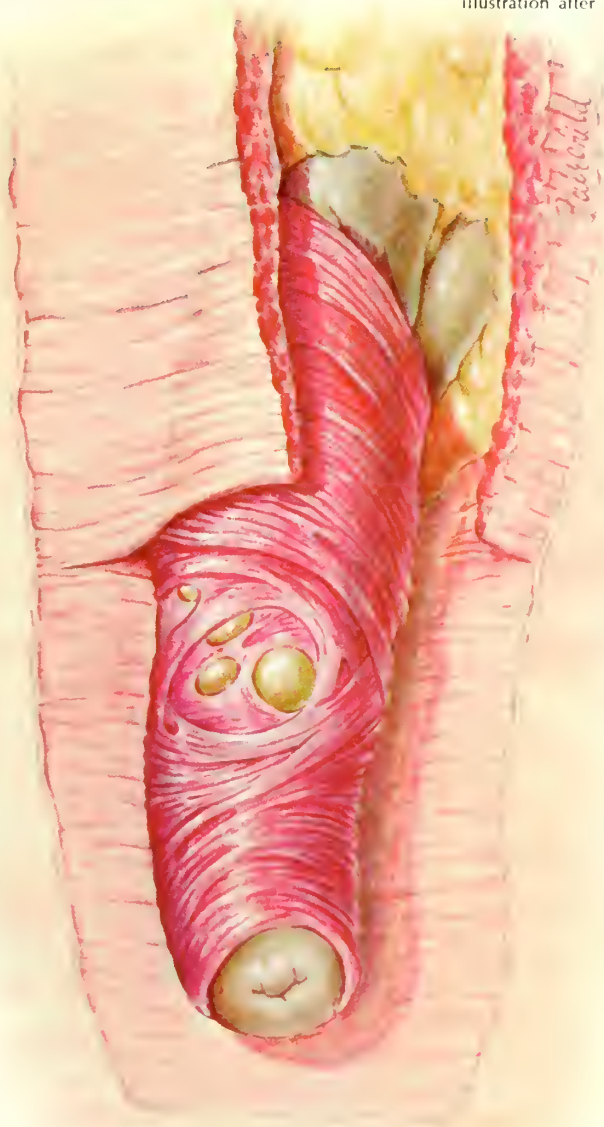
The Bar Association did not have the funds necessary to pay this lawyer the fees he earned in this gigantic undertaking. He deserted his practice and his family to gather the evidence necessary for these prosecutions and present it to the appropriate bodies. The facts in the cases were fantastic.

The climax in these cases came with the appearance in court of an eighteen year old girl from Peekskill, New York. She was the mother of two children, aged 13 and 3 months old. While pregnant with her second child, her 19 year-old taxi driver husband coerced her into signing a paper which she did not understand. But a few days later he handed her a certified copy of a divorce decree issued by this Geneva County Court, and her husband walked out and left her and remarried. This mother had to join the welfare rolls to support her and her babies.

One of the Commissioners reacted to this by saying that he had always assumed that this divorce racket was a scheme to satisfy the whims of the rich and well-to-do who were going to swap spouses regardless of the law, and the Commissioner thought that the Alabama courts and lawyers might as well get the benefits from fulfilling these wishes. But it had never occurred to him that this was inflicting untold hurt and injury on innocent children and people unable to protect themselves.

This tremendous amount of time and talent

(Continued on Page 64)



HOW IMPORTANT IS THIS
IN YOUR DIAGNOSES OF SMOOTH MUSCLE SPASM?

PERHAPS VERY IMPORTANT

The sphincter of Oddi is made up primarily of smooth muscle fibers. It permits the gall bladder to fill, regulates the flow of bile and pancreatic enzymes and in dysfunction is a primary cause of Biliary Dyskinesia. The sphincter of Oddi is but one of five major foci of smooth muscle spasm where SPACOLIN® (Alverine citrate) acts directly with rapid onset and long duration. No neurotropic side effects because Spacolin is a musculotropic counter-spasmodic unrelated to atropine or atropine-like drugs. Spacolin is not contraindicated in prostatic hypertrophy.

SPACOLIN® (Alverine citrate)

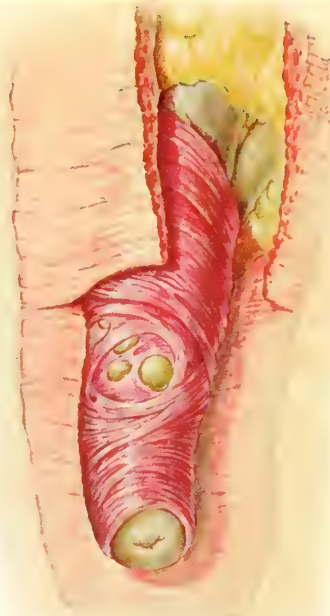
Each tablet contains: Alverine citrate 120 mg.

INDICATIONS: Smooth muscle spasmolytic for use in spastic colon, spastic conditions of the gastrointestinal tract, biliary dyskinesia, cholecystitis, spasm associated with peptic ulcer,* achalasia, pylorospasm, spasm attendant to diarrhea, spastic conditions of the genitourinary tract attributable to inflammation and calculi, certain primary dysmenorrheas and as an aid in cystoscopic, esophagoscopic and gastroscopic examinations. **DOSAGE:** One tablet after meals 1 to 3 times daily at discretion of physician. When treating spasm associated with peptic ulcer, achalasia or pylorospasm, administer tablets ½ hour before meals. In dysmenorrhea, one tablet 3 times daily starting at onset of discomfort. **PRECAUTION:** Caution is recommended when using in hypotensive patients. **SIDE EFFECTS:** In common with other smooth muscle depressants, Spacolin temporarily lowers blood pressure.

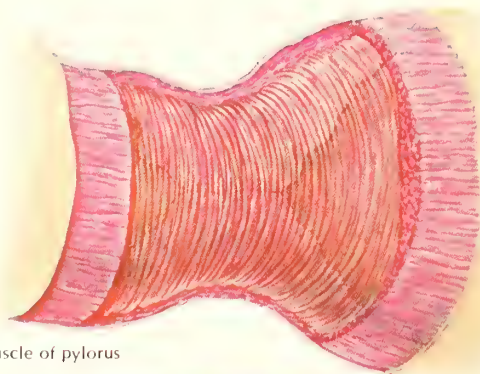
*Antacid and dietary measures are of primary importance in ulcer treatment and should not be neglected.



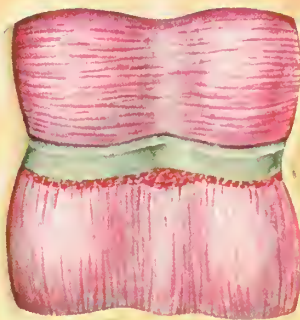
PHILIPS ROXANE LABORATORIES Division of Philips Roxane, Inc., Columbus, Ohio



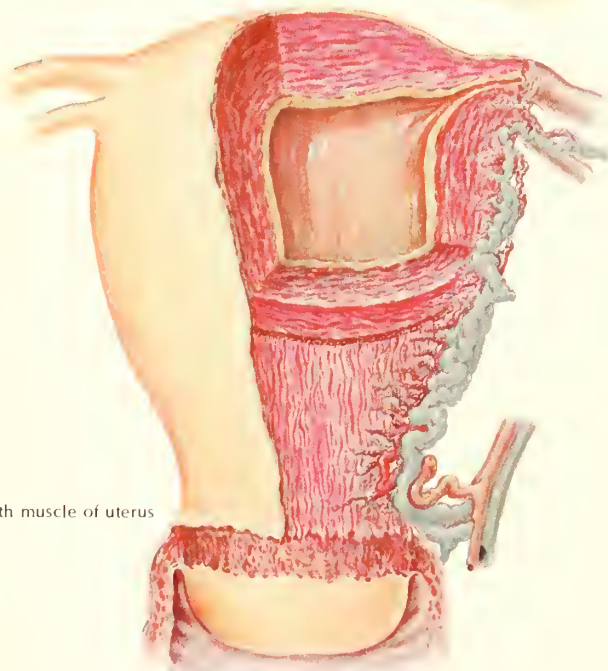
smooth muscle sphincter of Oddi



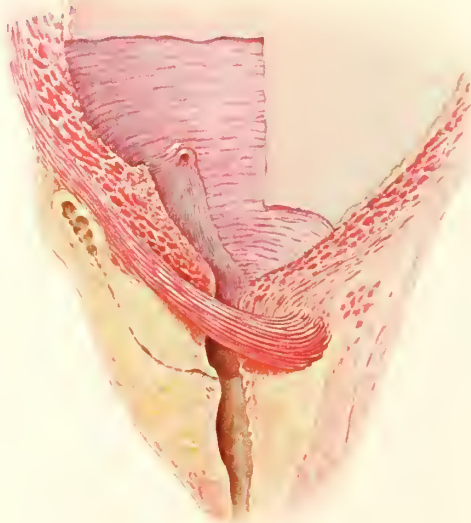
smooth muscle of pylorus



smooth muscle of colon



smooth muscle of uterus



smooth muscle of urinary bladder

**brings
peace to the
hyperactive
colon**



CANTIL® (mepenzolate bromide)

helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function... Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects... Urinary retention, noted in two cases was eliminated in one by reducing dosage."¹

IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withdraw in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

¹ Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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FOR PATIENTS
YOU SEE
EVERY DAY**

Continued from Page 60)

by this able attorney was not for the benefit of this unfortunate child-mother and her babies. It was not for the lawyers that this task was undertaken and brought to conclusion. It was not for the judges or the judiciary that this was done. It was for the benefit of all the public, both in and out of the bar, and in and out of Alabama for whom this activity was undertaken. The performance of this chore was not an isolated act of benevolence by a prominent lawyer. It was an obligation on him as a member of a group which is dedicated to this public welfare. The fact that it is an obligation makes us a profession.

A trade, business, finance, manufacturing, selling, and the like, are all rightly maintained for private interests. There are developed trade secrets or designs, devices or products subject to patent or copyright for the sole and exclusive benefit of the creator or designer. A profession works exactly the opposite. For example, I draft a deed or will or trust agreement or pleading in court, and none of these belong to me to be protected by statute or otherwise for use in my law practice for my clients. Or suppose I think up the use of a large photograph of a naked human body to be prominently displayed in court to demonstrate injuries in the trial of damage suits such as is used by the notorious lawyer named Belli. These techniques would belong to the public for use by anyone the moment they were created by me. That is part and parcel of the practice of law. Anyone acting otherwise would not be engaged in the practice of our profession.

The practice of medicine is precisely like the practice of law in this regard. No doctor would ever think that he could monopolize any new or improved or better treatment or diagnosis. The techniques developed by one physician are available for the world the moment they are developed.

Since professions render service in the public interest for human beings who are not machines, there are several corollaries which

should be apparent. In the first place, there are no absolute standards for members of a profession. In other words, the best doctor in the world for me is not necessarily the best doctor for you. The best lawyer for you may or may not be the best lawyer for me. Of course, there are some surgeons with greater facility with the knife than others. Some lawyers have more poise or dramatic flare before a jury than others. But this does not mean that one member of the professions is better than another for the particular client or patient.

This is so because of the nature of what the professional man has to sell. He does not have a commodity of standard weight and measure to give. He has some skill to sell, but it is of varying proficiency and in different areas. But, much more important, he has an attitude to sell. It might be called personality. But the recipient must have faith and confidence in the practitioner, or there is no sale. If the client or patient does not believe in the lawyer or doctor, there is no relationship, or there should not be. And when that faith and confidence exists, it is the most valuable relationship in society outside the home.

This is the reason members of a profession do not advertise. No one today would deny the old saw that it does pay to advertise. But what can a professional man advertise? If I were to advertise that I am the best trial lawyer in town, I would be telling a lie. There is no best trial lawyer in town. If I were to advertise that I would do anything any other lawyer could do for a cheaper price, I would cheapen the profession without increasing my practice. I could stand outside the office of other lawyers all day long and I would not entice away a single client from the other lawyer. People do not come to lawyers based on their price. They go to lawyers for something which is not measurable in dollars and cents.

The relationship between physician and patient is precisely the same. What you have to

(Continued on Page 66)

DACTILASE®

Each tablet contains:

Dactil® (piperidolate hydrochloride), 50 mg.;

Standardized cellulolytic* enzyme, 2 mg.;

Standardized amylolytic enzyme, 15 mg.;

Standardized proteolytic enzyme, 10 mg.;

Pancreatin 3X** (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established.

**As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

WHEN
STOMACHS
ARE ALL
BUTTERFLIES

AND
GAS

In chronic or acute indigestion, fluttery, gassy stomachs obtain prompt, gratifying relief through the antispasmodic, surface anesthetic and enzymatic activity of Dactilase. Dactilase decreases hypermotility and pain and reduces the production of gas. Dactilase does not induce stasis, but helps restore normal tone. It has little or no effect on enzyme secretions, but *adds* enzymes, thus contributing to the digestive efficiency of the patient.

Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201



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FOR PATIENTS
YOU SEE
EVERY DAY

(Continued from Page 64)

sell cannot be the subject of an advertisement, and to try to advertise it anyway is to tell a lie.

It is the relationship between the practitioner and the patient which is so valuable to society. For example, though the courts require "the truth, the whole truth, and nothing but the truth" for trials, there is an exception for attorney-client. This relationship is so important that society would rather forego the truth in trials than jeopardize the full and free disclosures made between a client and his attorney. It is not the lawyer

who gets this preferred treatment. It is the relationship which society has found to be so worthwhile that it is not to be jeopardized even in the pursuit of truth in a legal proceeding. There is this same privilege between physician and patient in some States. But the basis of the privilege is the worth of the relationship, not the flattery of the profession.

This relationship is so valuable that it should be preserved and cherished by those of us who practice it. We are not members of a closed shop labor union. We are practitioners of a profession. May we forever maintain it so.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)



7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 595-1151

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 40 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL

HILL CREST IS FULLY ACCREDITED BY THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

**WARMTH
FOR COLD
HANDS AND FEET**



For cold hands and feet, nothing beats hot stoves—but they *are* awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients *like* Gerilid and *know* they are getting relief.

GERILID™

Each chewable tablet contains:
nicotinic acid (niacin) 75 mg. and
aminoacetic acid (glycine) 750 mg.

Administration and Dosage: One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

Side effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

Supplied: Packages of 50 chewable tablets.

Also available in liquid form as Geriliquid®, in bottles of 8 and 16 ounces.

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Alabama Department of Public Health



SAFEST PLACE IN WORLD TO HAVE A BABY—ALABAMA?

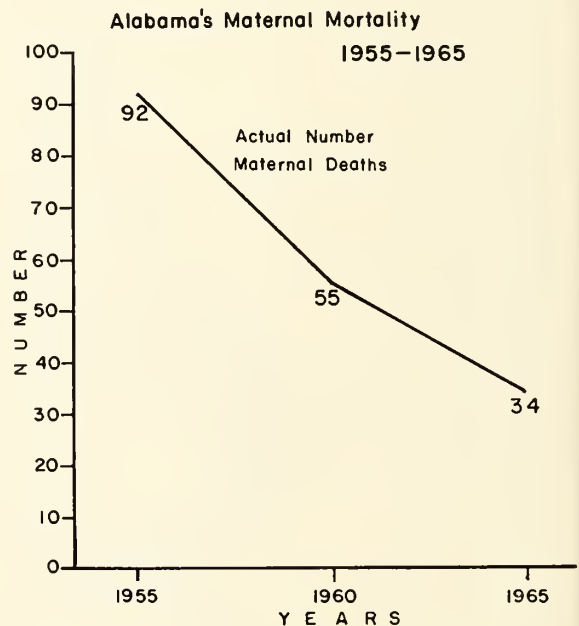
H. H. Klingler, M. D., FACS, FICS, FACOG

If the reduction in maternal deaths in Alabama continues for the next ten years as it has over the past ten years, this state will be the safest place on earth to have a baby. Alabama's maternal mortality chart indicates the rapid reduction in maternal deaths that is taking place in this state. Percentage wise the reduction in maternal deaths in Alabama over the past ten years is the greatest of any state in this country. There was a 38 per cent reduction from 1955 to 1960 and a 63 per cent reduction in 1965 over 1955. This is accounted for by several factors:

First, the effort exerted by personnel in offering improved service. Physicians, hospital personnel, public health personnel, and ancillary services such as nutrition, social service, and welfare have each contributed to this improved situation. Many hospitals over the state have co-operated in a 24-hour plan for hospital delivery. This tends to limit "granny" midwife activity. One hospital offering this service reduced midwife activity from 1,400 to 700 deliveries during the first year of operation—50 per cent!¹

Second, improved antenatal care. Physi-

Dr. Klingler is Diplomate American Board of Obstetrics and Gynecology, Director Bureau of Maternal and Child Health, Alabama Department of Public Health.



(Figure 1)

cians as well as all county health departments have facilities to provide first-rate type of care including Rh, serological, Pap, PKU, hemoglobin testing, etc., with a definitive follow-up diagnosis and indicated therapy. During one month of last year 100 per cent

(Continued on Page 70)

WHAT'S THE
COMMON
DENOMINATOR? ... IRON



In fact, there's as much iron...250 mg.
...in a 5 cc. ampul of Imferon (iron dextran
injection) as in a pint of whole blood.
When iron deficient patients are intolerant
of oral iron...or orally administered iron
proves ineffective or impractical...or if
the patient cannot be relied upon to take oral
iron as prescribed, Imferon (iron dextran
injection) dependably increases hemoglobin
and rapidly replenishes iron reserves.

IMFERON® (iron dextran injection)

IN BRIEF: ACTION AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses. Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

LAKEVIEW LABORATORIES, INC., Milwaukee, Wisconsin 53201



PRODUCTS
FOR PATIENTS
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EVERY DAY

(Continued from Page 68)

of mothers in one county had received prenatal care.²

Third, improved care at time of delivery. Through hospitalization plans for the indigent which is being used in an increasingly larger scale, midwife activity is being curtailed. The practice of medicine is being placed in the hands of physicians where this medical specialty rightfully belongs.³ Special service is available for complications during the prenatal period, during the time of delivery, and during the postpartum period. This service is supervised by certified obstetricians who are faculty members of one of the country's foremost medical schools. These consultants actually spend considerable time at these complication centers and offer their assistance in the care of pathological cases.

Fourth, improved postpartum care. Routine examinations at the time of the postpartum visit has minimized our so-called "obstetrical cripple" situation which a few years ago was so prevalent—chronic backache, chronic discharge, chronic fatigue, uterine displacements, unhealed lacerations, anemia, inflammatory disease, vaginitis, etc. Early correction of these conditions improves rehabilitation.

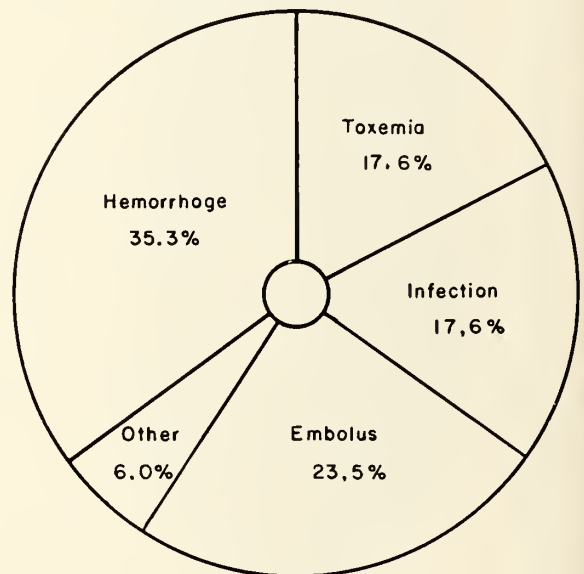
Most physicians and county health departments are equipped to take smears, equipped to care for erosions, cervical lacerations, eversion, equipped to obtain Pap smears and trained and equipped to offer family planning for the future. All acceptable methods of family planning are available. Emphasis is placed especially in the family planning category upon the "high risk" mother at the postpartum visit. If future pregnancies are deemed inadvisable and might possibly jeopardize the mother's life, every effort is made to make the mother fully cognizant of the importance of contraception. Incidentally, there were 6,208 fewer babies born in Alabama in 1965 than in 1964.

The Alabama Department of Public Health has been very active in maternity care during

1965 as is borne out by the fact that 25.6 per cent of all pregnant women depended upon the county clinics for service—about one of every four! This indicates that the local county health departments through their dedicated personnel are offering an efficient and respected type of service.

The main category of causes of death remains similar to previous years with one major exception. Hemorrhage, toxemia, and infection have been the triad responsible for the majority of maternal deaths. The exception for 1965 is the fact that embolus as a cause of death has displaced both toxemia and infection as can be seen on the pie chart.

Causes of Maternal Deaths — 1965



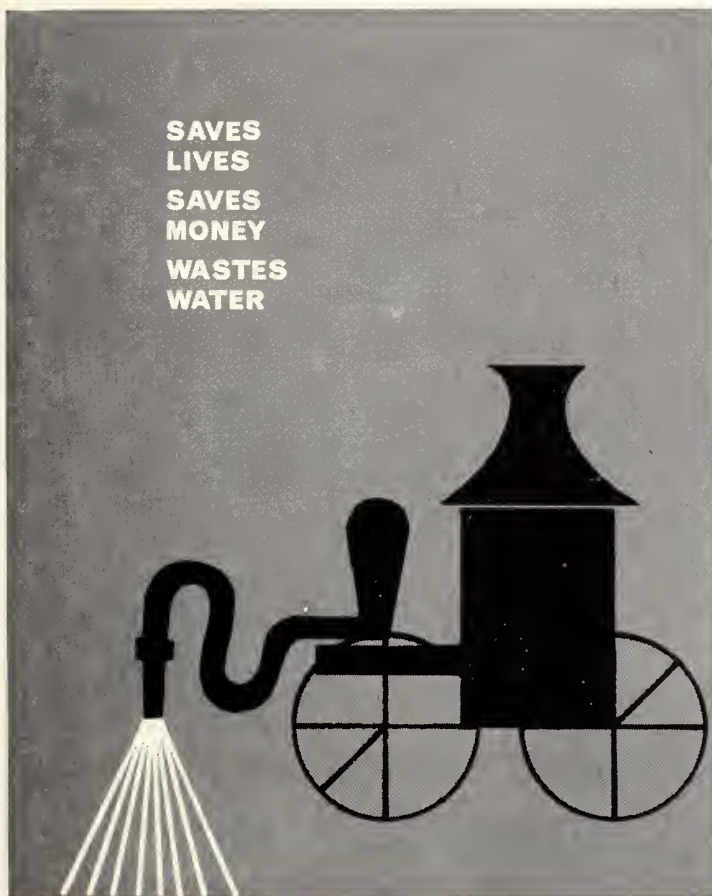
(Figure 2)

Another interesting observation is the fact that in previous years there have been several cases of rupture of the uterus reported as a cause of death. During 1965 there was a complete void in this category. Undoubtedly, in my opinion, this single fact indicates a definite improvement in obstetrical practice.^{4, 5}

Hemorrhage which accounted for more deaths than any single cause was associated

(Continued on Page 72)

**SAVES
LIVES
SAVES
MONEY
WASTES
WATER**



METAHYDRIN (trichlormethiazide) is prescribed by physicians because it not only approximates the diuretic efficacy of parenteral meralluride injection . . . but, *it is the least expensive of all "brand-name" thiazides.* Therefore, when you prescribe METAHYDRIN (trichlormethiazide) your patients receive the thiazide diuretic that removes a little more salt and water than earlier thiazides, with relatively less loss of potassium . . . and, it's therapy they can more easily afford . . . *only pennies a day.*

METAHYDRIN[®]

(trichlormethiazide)

oral diuretic

Dosage: One 2 or 4 mg. tablet once or twice daily.

Precautions: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

Side Effects: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have occasionally been noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by the administration of thiazides.

Contraindications: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

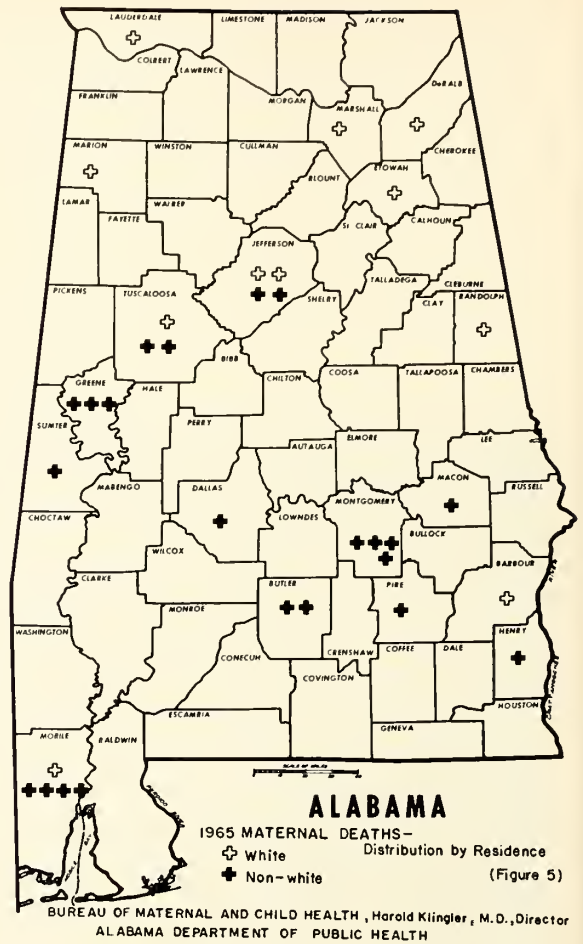
How Supplied: Bottles of 100 and 1000 tablets.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201



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EVERY DAY**

DEPARTMENT OF HEALTH



with various complications including post-partum atony, afibrinogenemia, abruptio placenta, etc.

Toxemia included cases of eclampsia. Infections were associated with hydatidiform mole, tetanus subsequent to abortion, and other infections following abortion. Incidentally, in regard to tetanus, some time ago tetanus immunization was recommended for pregnant women with the thought in mind to limit the number of tetanus neonatorum deaths that were carrying a mortality in the state from 12 to 16 each year.⁶ Since the inauguration of tetanus immunization for maternity patients, the number of tetanus neonatorum deaths has been reduced to zero over the past year. Six maternal deaths were classified as due to abortion. There were only two deaths reported subsequent to cesarean

section. There were eight stillborn infants delivered of this group of 34 patients.

The age group was rather equally distributed.

AGE GROUPS

Ages	15-20	21-25	26-30	31-35	36-40	41-45
Actual No. of Deaths	5	8	5	7	7	2

(Figure 3)

The youngest death occurred in a 15 year old eclamptic and the oldest of embolism, in the home, at 43 years. Although 25.6 per cent of all maternity patients were clinic patients, only five deaths occurred in this group—less than 15 per cent. Of the deaths due to emboli, classifications consist of pulmonary, cerebral,

(Continued on Page 74)

**BRING IT DOWN
AND
KEEP IT DOWN**

100
102

Metatensin lowers blood pressure and keeps it low—effectively and economically. It combines reserpine with trichlormethiazide which affords more potent saluresis with less loss of potassium than from earlier thiazides. Reserpine contributes antihypertensive effect by relieving anxiety and tension. Metatensin is well-tolerated over long periods; with its effectiveness and economy it assures antihypertensive therapy you and your patients can stay with.

METATENSIN®

Each scored tablet contains:
METAHYDRIN® (trichlormethiazide)
2 mg. or 4 mg. and
Reserpine 0.1 mg.

Usual adult dose: One tablet twice daily. **Precautions and side effects:** Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery.

Contraindications: Complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.

Supplied: Metatensin tablets, 2 mg., 4 mg.—bottles of 100 and 1000.

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(Continued from Page 72)

and air embolus. Several of these diagnoses were based upon autopsy findings. Autopsy examinations were performed in 32 per cent of these fatalities.

Two state maps (Figures 4 and 5) indicate the geographical location of deaths and the place of death by residence.

References

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Montgomery County Health Dept.

2. Personal Communication, Dr. Otto Burton, Montgomery County Health Dept.

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4. Journal of the Medical Association of The State of Alabama, Vol. 29, No. 9, December, 1959, H. H. Klingler, M. D.

5. Report of The Committee on Maternal and Child Health, Alabama Medical Association, 1965, H. H. Klingler, M. D.

6. Tetanus Neonatorum In Alabama, Journal of the Medical Association of The State of Alabama, August, 1962, H. H. Klingler, M. D.

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director

Current Morbidity Statistics

1966

	April	May	*E. E.
			May
Tuberculosis	119	79	146
Syphilis	150	154	135
Gonorrhea	338	431	325
Chancroid	0	2	1
Typhoid fever	1	0	2
Undulant fever	0	0	0
Amebic dysentery	4	1	3
Scarlet fever & strep. throat	519	336	77
Diphtheria	0	0	0
Whooping cough	1	0	9
Meningitis	15	11	6
Tularemia	0	0	0
Tetanus	1	0	2
Poliomyelitis	0	0	0
Encephalitis	1	0	1
Smallpox	0	0	0
Measles	526	186	478
Chickenpox	135	19	161
Mumps	23	18	80
Infectious hepatitis	43	39	46
Typhus fever	0	0	0
Malaria	0	0	0
Cancer	1,435	499	734
Pellagra	4	0	0
Rheumatic fever	19	8	17
Rheumatic heart	28	10	30
Influenza	4,204	437	90
Pneumonia	522	250	237
Rabies—Human cases	0	0	0
Pos. animal heads	5	1	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph. D., Director

May 1966

Examination for intestinal parasites	1,675
Examination for malaria	5
Salmonella & shigella (blood, feces, urine and other)	279
Examination for tubercle bacilli	4,378
Examinations for gonococci	2,076
Serological tests for syphilis	30,267
FTA	10
Darkfield	5
Brucella	1
General Bacteriology (cultures for isolation and confirmation)	22
Staphylococcus (cultures for isolation and confirmation)	190
Examinations for diphtheria	7
Streptococci examinations	1,653
Mycology	16
Agglutinations	21
Vincent's Infection	1
Complement Fixation tests	69
Tests for Phenylketonuria (PKU)	5,957
Cytology	669
Water examinations	2,594
Milk and dairy products examinations	3,583
Sea food examinations	74
Examination for Negri bodies (smears & animal inoculations)	409
Virology	2
Miscellaneous	303
Total	54,266

DIGITALIS—WOULD FDA APPROVE IT TODAY?

"... I would hate to be introducing digitalis as a new drug today. Anyone reading the toxicity and side effects would never use it in the present climate. However, digitalis has been with us long enough now that the toxicity and side effects have taken their proper place. They are there, to be sure, but not as prominently as the therapeutic effect."—Robert W. Ballard, M. D., in *Food Drug Cosmetic Law Journal*, (21: 31-32), January 1966.

When depressed patients say:



"I can't sleep at night"



"I'm tired all day long"

NORPRAMIN[®]
(desipramine hydrochloride)
non-sedating • rapid-acting
ANTIDEPRESSANT

restores normal patterns of sleep and activity

Norpramin (desipramine hydrochloride) reverses the signs and symptoms of depression including sleep disturbances, feeling of sadness, guilt, worthlessness, anxiety and bodily complaints without physical basis. In 2-5 days most patients become more hopeful, more active and less weighed down by their problems.

Norpramin (desipramine hydrochloride) has only slight sedative qualities, nevertheless sleep disturbances and restlessness are relieved as depression is lifted. If anxiety or tension develop or persist a tranquilizer may be added or dosage reduced. Side effects are usually mild, occurring in about 1 of 4 patients.

Indications: In moderate to severe depression—neurotic or psychotic. **Dosage:** Optimal results are obtained at a dosage of two 25 mg. tablets t.i.d. (150 mg./day). **Contraindications and Precautions:** Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of an MAO inhibitor. Safety in human pregnancy has not been established. **Adverse Effects:** Usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste", sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs. **Supplied:** Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

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NEW CENSORS TOUR HEALTH DEPARTMENT

Two newly elected members to the Board of Censors' subcommittee on Public Health toured the Alabama Department of Public Health in Montgomery, Thursday, May 19. The program was conducted by Dr. Ira L. Myers, state health officer, to orient new members to public health activities throughout the state. Dr. Luther L. Hill of Montgomery, also a committee member, was present for the meeting.

The new committee members are Dr. Everett L. Strandell of Brewton, who will serve a five-year term replacing Dr. J. Paul Jones, retiring member, and Dr. Jasper D. Bush, Jr., Gadsden, who will complete the unexpired term of Dr. J. O. Finney. Both positions were filled during the April meeting of the Medical Association of the State of Alabama in Mobile.

The importance of environmental health surveillance activities was emphasized during a visit to the Radiological Health Laboratory. William T. Willis, director, Division of Radiological Health, Bureau of Sanitation, introduced the group to functions of this division which also include x-ray control and radionuclide control.

Dr. Thomas S. Hosty, director, Bureau of Laboratories pointed out technical facilities available for testing within the state laboratory.

The communicable disease picture in Alabama was outlined by Dr. W. H. Y. Smith, director of the Bureau of Preventable Diseases. He explained the role played by the bureau in prevention, case finding, and treatment of such diseases.

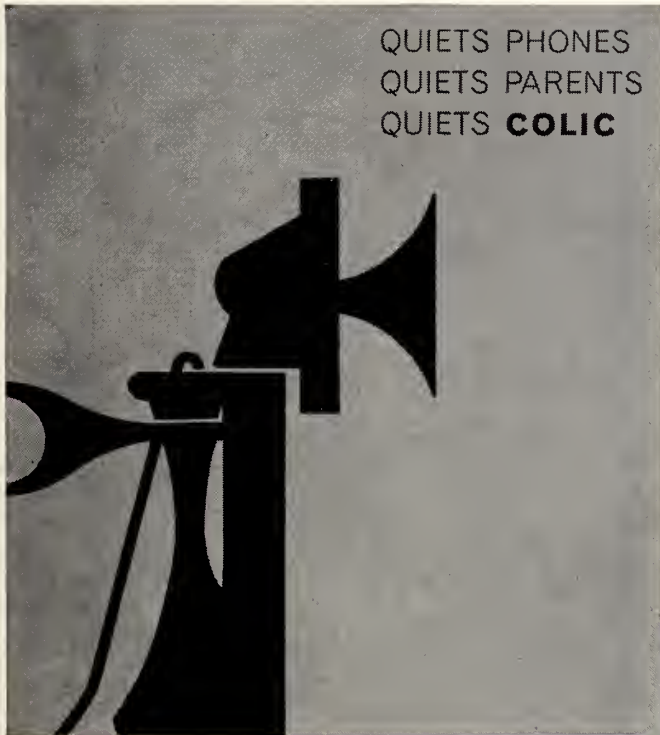
Orientation in the Division of Hospital Planning was included on the physicians' agenda. Clay H. Dean, director, explained activities which include hospital and medical facilities survey and construction, hospital licensure, and health mobilization.

A first-hand view of printing, mimeographing, addressographing, and data processing was awarded the board members by Charles B. Dulin, director, Division of Data Processing.

During their tour of the Bureau of Nursing, particular emphasis was placed on procedures and policies involved in setting up home health agencies under Medicare.

Dr. Harold H. Klingler, director, Bureau of Maternal and Child Care, outlined programs designed to improve the health of mothers and children. Dr. Klingler also mentioned highlights of this program during the past year which included the lowest maternal death rate ever recorded in Alabama and legal establishment of the phenylketonuria testing program.

In colicky infants Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying and improves feeding patterns. It permits sleep and rest for patient and family. The less than hypnotic amount of phenobarbital in the recommended dose affords a mild, calming action and enhances the antispasmodic action of Piptal (pipenzolate bromide). The latter drug, as reported in the medical literature, has a favorable ratio of effectiveness to side-effects which is unusual in anticholinergics and thus is particularly appropriate to pediatric use.



PEDIATRIC PIPTAL® WITH PHENOBARBITAL

each cc. contains 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol.

Pleasant-tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be given by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. It is contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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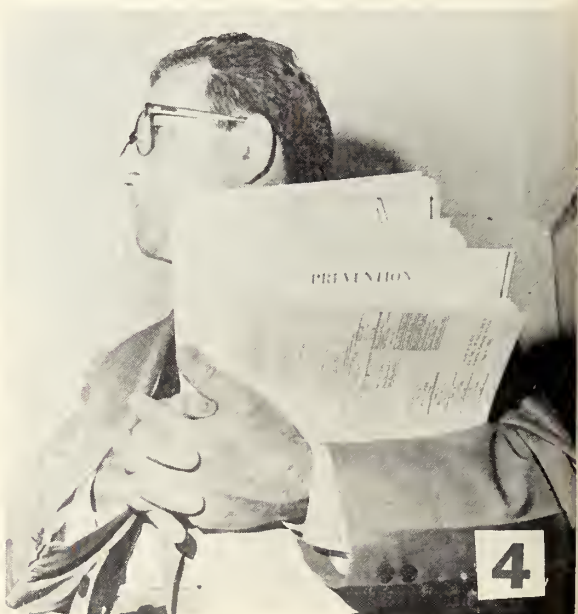
1. Dr. Luther L. Hill, Dr. Everett L. Strandell, Mrs. Dorothy Holland, Nursing Consultant, Bureau of Nursing, and Dr. Jasper D. Bush, Jr., study map showing nursing districts and counties in which home nursing programs are being conducted. Miss Norma L. Chandler, Secretary, Bureau of Nursing, points out areas which are the potential home health agencies that will be set up first under Medicare.



2. Dr. Hal D. Broadhead, Medical Consultant, Alabama Department of Public Health; Dr. Jasper D. Bush, Jr.; Dr. Everett L. Strandell; and Dr. Luther Hill; are pictured during their tour of the Radiological Health Laboratory. W. T. Willis, Director, Division of Radiological Health, Bureau of Sanitation, explains use of a 400 channel gamma analyzer used in testing milk for radioactivity.



3. Dr. Jasper D. Bush, Jr., and Dr. Everett L. Strandell discuss cancer registry with Dr. W. H. Y. Smith, Director, Bureau of Preventable Diseases.



4. Dr. Jasper D. Bush, Jr., new State Committee of Public Health Member, appears overloaded with materials received during tour of Alabama Department of Public Health.



5. Dr. Luther L. Hill, Dr. Everett L. Strandell, and Dr. Jasper D. Bush, Jr., listen to an explanation by W. T. Willis, Director, Division of Radiological Health, Bureau of Sanitation, of the low beta counter instrument used in testing milk for radio activity.



6. Miss Dorothy Tillery, IBM key punch verifier operator; Dr. Luther L. Hill; Dr. Jasper D. Bush, Jr.; Dr. Everett L. Strandell, State Committee of Public Health members; and Charles B. Dulin, Director, Division of Data Processing.

The discomforts of

**DIARRHEA
MUCOUS COLITIS
DIVERTICULITIS
SPASTIC URETERITIS
BLADDER SPASM**

*are relieved by
direct musculotropic action
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BRAND THIPHENAMIL HCl

Available in 100 milligram pink sugar-coated tablets.

The high therapeutic index permits dosage sufficient to relieve spasm promptly. The usual initial dose is 4 tablets. Maintenance dosage is usually one or two tablets 4 times a day.

Trocinate[®] BRAND THIPHENAMIL HCl
BETA DIETHYLAMINOETHYL DIPHENYLTHIOACETATE HYDROCHLORIDE

*Directly relaxes smooth muscle spasm
Combats hypermotility*

Non-mydriatic, may be used in glaucoma

Trocinate (Thiphenamil HCl) has been found in three clinical studies, (J. Mo. Med. Assoc., 48:685-6; Med. Rec. & Annals, 43:1104-6; J. Urol., 73:487-93), to be effective and to be virtually free of side-effects. Fifteen years of wide clinical usage has affirmed the safety and effectiveness of Trocinate.

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Advantage: Both components of Regroton are long-acting.

Average dosage: One tablet daily with breakfast.

Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.

Warning: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.

Side effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness. For full details, see the complete prescribing information.

Availability: Bottles of 100 and 1000 tablets

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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. Further information is available from the central office, 19 South Jackson Street, Montgomery, Alabama 36104—or Phone 263-6441.

LOCATIONS WANTED

PHYSICIANS WANTED

Gen. Practitioner—age 29, protestant, married; Univ. of Ala. 1962; military oblig. completed; presently in practice, desires change to central or northern part of state. LW-42

OB-Gyn—age 43, married, military oblig. completed; Tufts Medical School 1947; Board Elig.; seeking pract. in solo, group, or association. LW-43

Gen. Surg.—Cardio-Thoracic—age 33, protestant, married; New York Medical School 1956; Elig. Am. Bds.; completed mil. oblig.; seeking solo, group, assoc. or institutional; available July 1966. LW-44

Gen. Surg.—age 45, protestant, married; Univ. of Nebraska 1941; certif. in surg.; seeking loc. in indust., instit., or educational. Available in 2 wks. LW-45

Gen. Surg.—Thoracic and Cardiovasc., age 37, protestant, married; Univ. of Tenn. 1959; eligible Am. Bds.; Mil. oblig. completed; seeking solo, group or associate practice. Available July 1966. LW-46

E. N. T.—age 30, protestant, married; Western Reserve Univ. 1959; Elig. Am. Bds.; Maxwell AFB, available July 1966. LW-47

Int. Med.—age 31, protestant, married; Univ. of Okla. School of Med. 1959; Elig. Am. Bds.; completed mil. oblig.; seeking location in group or associate; available July 1966. LW-48

Int. Med.—age 34, protestant, married; Tulane Univ. Med. School 1956; military oblig. completed; seeking location in group, indus., assoc. or instit. Available now. LW-49

Neurology—age 41, protestant, single; Military oblig. completed; Univ. of Pa. 1952; Certified Am. Boards; seeking location in group, assoc. or instit. Available July 1966. LW-50

Allergy—age 30, Jewish, single; Univ. of Toronto 1959; Mississippi license; Elig. Am. Boards; presently USAF, available July 1966; seeking location in group or assoc. LW-51

Two GP's or Internists need for full-time staff positions; full university benefits; salary commensurate with training and exp.; opportunities for participation in clinical research and teaching. Contact: Dr. S. B. Alexander, Dir., Student Health Center, Univ. of Ala. Tel. 205-759-1309. PW-24

Franklin Co. town seeking phys. for gen. pract. or gen. surgery; 2300 pop., trade area 20,000; New Hill-Burton 30-bed hosp. to open in Sept. 1966. Fully accred. high school. Higher educational advantages nearby. PW-25

Ophthalmologist needed for practice in town of 22,500. Fully accredited hospital and 50-bed nursing home with nationally accrd. sch. of nursing. New modern, air-cond. clinic for 12 physicians with expected expansion. Guaranteed salary OR 50% gross. Full partnership and option to buy into clinic after 2 years. PW-26

S. Ala. town seeking surgeon and GP. Pop. 2500, trade area around 30,000. 50 mil. Ala. and Fla. coast on Gulf of Mexico; 24-bed hosp. with office space and housing available. Finest schools, churches, and social activities. PW-27

Internist needed for new modern clinic with all up-to-date facilities adj. to new hospital. Larger hosp. and Med. Center available in nearby Birmingham. Salary open dep. on qualifications. PW-28

Large med. center in S. Alabama town of 9,000 seeking Ophthalmologist. Hospital facilities available for any type of eye surgery. Town situated within 80 mi. of Gulf of Mexico with its miles of beaches and recreational features. Finest schools, churches, social activ. PW-29

Internist needed for large family practice group as associate; South Ala. in Mobile. Salary first year with oppor. to become fulltime partner. Nine-room clinic with all eqpt. for X-ray, EKG, Lab., etc. PW-30



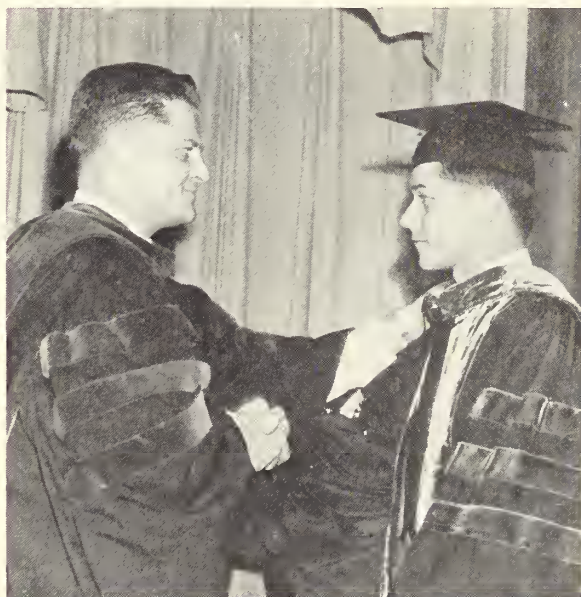
around the state



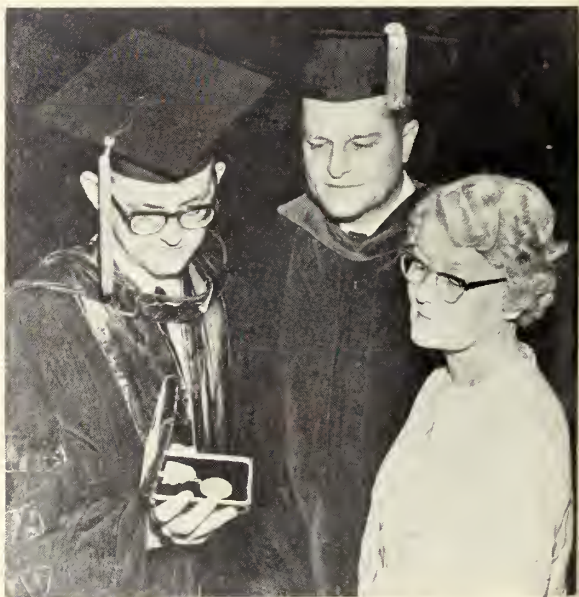
Undergraduates win awards for Outstanding Scholarship. Left to right: Wayne P. Campbell, Essay Award; John C. Blythe, Junior Award (3rd place); Terry B. Cooper, Freshman Award (2nd place); James S. Sullivan, Sophomore Award (1st place); Richard M. Champion, Freshman Award (1st place); Christopher W. Norwood, Sophomore Award (3rd place); Donald B. Williams, Freshman Award (3rd place); Charles B. Dahlke, Sophomore Award (2nd place); Tom B. Vaughan, Jr., Junior Award (2nd place). Terry B. Cooper is pursuing his medical studies through one of the State Merit Scholarships.



Dean S. Richardson Hill, center, is pictured with five top graduates: Left to right: A. Reeves McLeod (3rd place); Joseph N. Cunningham, Jr. (2nd place); J. Michael Straughn (1st place); Dean S. Richardson Hill; R. Burt Prater (4th place); T. Bradley Fulkerson (5th place).



Dean S. Richardson Hill places the hood of the medical doctor on graduate Jerry D. Dillard.



Pictured above are J. Michael Straughn, winner of the highest award, the Dean's Medal; Dean of the Medical College, Dr. S. Richardson Hill; and Straughn's mother, Mrs. M. A. Straughn. The Dean's Medal is given in recognition of high scholarship and outstanding leadership displayed by a graduate.

(Continued on Page 85)

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If you are interested in performing the five basic blood chemistries. **With . . .** Only a few seconds working time per test. **With . . .** Results in thirty minutes or less. **With . . .** The accuracy that only a colorimetric procedure can give you. **Without . . .** An increase in personnel. **Without . . .** Making room for bulky equipment. **Without . . .** Training Problems.

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AROUND THE STATE

(Continued from Page 32)

WALKER COUNTY

The Medical Society of Walker County held a social meeting May 25 at the home of Dr. T. J. Payne. Twelve members were present. According to Dr. R. R. Roper, secretary, the next meeting will be a business meeting to be held at the Musgrove Country Club in September. The speaker will be announced later.

MORGAN COUNTY

The Morgan County society met June 7 at the Congress Inn Motel with 37 members present. Dr. Ralph Bowers, chairman of surgery, VA Hospital in Memphis, spoke on "A Comparative Study—Medical vs. Surgical Management of Hyperthyroidism."

The society decided to join with the University of Alabama Medical Center in its Heart, Cancer, Stroke Program. The next meeting will be July 5 at 6:30 p. m., Congress Inn Motel.

CRENSHAW COUNTY

Dr. M. R. Plowden, hospital administrator, was the speaker at the Medical Society of Crenshaw County's meeting June 7 at the Crenshaw County Hospital. He spoke on the

co-operation of hospital and medical staffs under medicare. The next meeting will be July 5 at 7 p. m., Crenshaw County Hospital.

GREENE COUNTY

A program on medicare was given by Hospital Administrator Dr. Dave Patton to the Greene County Society June 1 in Eutaw. All four members of the county society were present.

CULLMAN COUNTY

The Cullman County Medical Society met June 6 at the Allsteak Cafe, Dr. J. G. Daves, president, presiding. Dr. Frank Stitt, Jr., addressed the group on "Pancreatic Diseases and Their Management." Other business transacted was a discussion of medicare, the blood bank, and the head start program. The next meeting will be at 6:30 p. m., August 1, Allsteak Cafe, when Dr. R. F. Williford and Dr. Max Richard will give the program.

COFFEE COUNTY

Dr. Wendell Vickers was the speaker at the Coffee County Medical Society meeting June 2. He spoke on "A Case of Arrhenoblastoma." The next meeting will be July 7, 7 p. m. at the Elba Hospital. Dr. James Stanley will deliver the program.

Alabama Boy Wins AMA "Award Of Merit"

An Alabama boy won one of the ten "Award of Merit" certificates presented by the AMA at the 17th International Science Fair in Dallas, May 11-14.

Paul Douglas McCraw, 16, Route 2 Box 46, Tuscaloosa, received the honor for his study on "Effects of High Frequency and Ultra Sonic Sound Waves on Mice." It was selected by a special AMA committee from the AMA Council on Postgraduate Programs from

among 419 finalists from 48 states, Canada, Costa Rica, Japan, the Philippines, Puerto Rico, Sweden and West Germany.

The award was presented at the health awards program by Dr. James Z. Appel, AMA president, Lancaster, Pennsylvania. Co-hosts were the AMA, the American Dental Association, the American Pharmaceutical Association and the American Veterinary Medical Association.

FIFTH ANNUAL SEMINAR FOR MEDICAL ASSISTANTS

UNIVERSITY OF ALABAMA

MONTGOMERY, ALABAMA

435 Bell Street

August 6-7, 1966

The Fifth Annual Seminar for Medical Assistants, sponsored by the University of Alabama with the support and assistance of the Alabama Medical Assistants Association and the Public Relations Committee, Medical Association of the State of Alabama, will be held at the Montgomery Center on August 6-7, 1966. Registration will be from 1:00-2:00 p. m., with the program concluding at approximately 4:00 p. m. on Sunday, August 7th.

The purpose of the seminar is to foster the growth of professionalism of medical assistants within the State of Alabama through examination and discussion of subjects of professional interest.

The Program

"The Power of Communications"—Miss Juanita Godfrey, Southeast Representative, Institute for Certifying Secretaries, Birmingham.

"Communications and Public Relations"—Panel discussion, Dr. T. Riley Lumpkin, Enterprise, Mrs. Ruth Reynolds, Gadsden, Mrs. Sarah Jackson, Anniston.

"Your Position in Community Leadership"—Aubrey Green, Past International President, Lions International, York.

"The Doctor Talks to His Medical Assistant"—Dr. J. O. Finney, Gadsden.

"The Medical Assistant Views Her Responsibilities"—Mrs. Judy Coleman, Parliamentarian, American Association of Medical Assistants, Dallas, Texas.

"Adverse Drug Reactions and Immediate Care"—Dr. H. H. Hutchinson, Montgomery.

"Doing More With Less Effort"—Dr. Wilson T. Ashby, Head, Department of Office Administration, University of Alabama.

"Medical Emergencies"—Dr. Ira Patton, Oneonta.

"Developing Organization Leadership"—Dr. Minnie C. Miles, Professor of Management and Past President, National B & PW Clubs.

"Medicare: Its Provisions and Implications"—Panel discussion, Dr. Ira L. Myers, Montgomery, Dr. J. Garber Galbraith, Birmingham, and Douglas M. Richard, Atlanta, Georgia.

"Emotionally Induced Illness"—Dr. Frank J. Nuckols, Birmingham.

The seminar is designed for individuals who are interested in or engaged in the medical assistant field. Membership in or affiliation with an organized group or chapter of assistants is not required for attendance.

MURFREESBORO—VACANCIES: STAFF PHYSICIANS for 1275-bed Neuropsychiatric Hospital, including 350 general medical and geriatric. Modern facilities for diagnosis and treatment of mental illness. Salary \$12,510 to \$22,365 depending on qualifications; fringe benefits; cost of moving to Murfreesboro will be paid by Veterans Administration; visit here for evaluation can be arranged at our expense. Excellent educational opportunities for students in this area. Contact Director, Veterans Administration Hospital, Murfreesboro, Tennessee.



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

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The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—Administration officials say that the doctor-patient relationship should not be impaired under medicare.

Dr. Philip R. Lee, assistant secretary of health, education and welfare for health and scientific affairs, said in an interview that federal officials, in drafting medicare regulations, had been doing their utmost to insure that the traditional doctor-patient relationship is preserved.

"The guidelines for the medicare program were developed with the close cooperation of so many physicians and other people in the health care field that this will provide the best assurance for the physicians, for the government, for Congress and for the public that the implementation of medicare will not alter the fundamental and vital personal relationship between the doctor and the patient," Lee said.

"This was clearly the intent of Congress."

Lee termed the cooperation of physicians and hospital officials in developing medicare guidelines as "extraordinary." He said he personally expects the doctor-patient relationship to improve under medicare because removal to a large extent of the financing problem will give a physician more leeway in ordering laboratory tests and sending a patient to a hospital.

"Our most important concern in imple-

menting the medicare program is education," Lee said. "The education extends to the doctor, the patient and administrators of the program."

Lee's office published a brochure for patients and another for doctors explaining what the medical insurance program does and doesn't do.

The Social Security Administration said that nine out of 10 of those 65 and over had enrolled in Plan B of medicare by the second signup deadline of midnight, May 31. The original deadline was extended for two months in an effort to get a reply from as many as possible of the 19.1 million aged persons eligible. More than 400,000 signed up during the two months, bringing the total to about 17.2 million. About one million said they didn't want Plan B coverage. Those who did not sign up this time will not have another opportunity until Oct. 1, 1967, and they then will have to pay at least 10 per cent higher premiums.

President Johnson invited about 200 physicians and hospital administrators to a White House meeting on June 15 "to examine problems that may arise and to discuss cooperative arrangements so that the (medicare) program will get off to a good start."

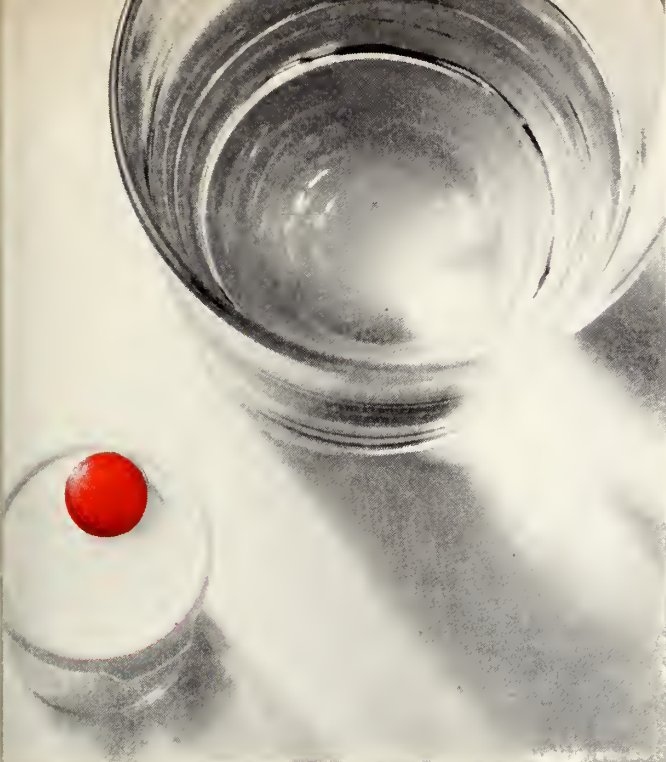
In addition to Johnson, speakers at the meeting included HEW Secretary John W. Gardner; HEW Undersecretary Wilbur J. Cohen; Lee; Surgeon General William H. Stewart; Social Security Commissioner Robert M. Ball, and Arthur E. Hess, director of medicare.

Social Security headquarters at Baltimore set up an around-the-clock medicare information service to help its district offices in responding to queries from, beneficiaries, physicians, hospital administrators and others.

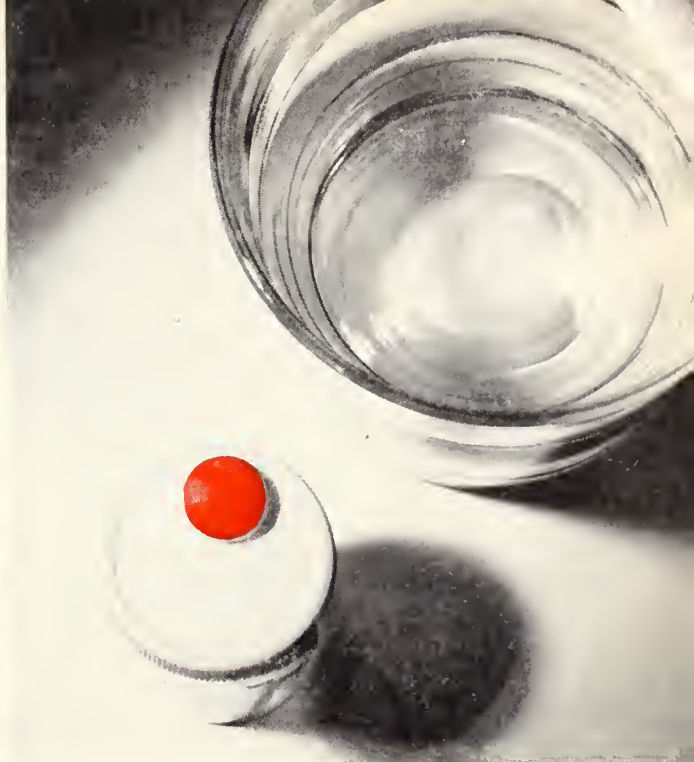
* * *

The Defense Department has slashed by

(Continued on Page 90)



one mid-morning



one mid-evening

New 300 mg tablet It's made for b.i.d.

For Adults—2 tablets provide a full 24 hours of therapy...with all the extra benefits of DECLOMYCIN...lower mg intake per day...proven potency...1-2 days' "extra" activity to protect against relapse or secondary infection.

DECLOMYCIN[®] **DEMETHYLCHLORTETRACYCLINE** **300mg FILM COATED TABLETS**

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photo-

allergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of

treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg of demethylchlortetracycline HCl.

Tablets: film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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674-6-3838

(Continued from Page 88)

almost one-third—from 2,496 to 1,713—its special draft call for physicians to be delivered to the armed forces this summer.

Under the revised doctor draft call, the Army will take 958, the Navy 405 and the Air Force 350.

The Pentagon said casualties in Southeast Asia had been fewer than expected and the number of volunteer physicians had exceeded estimates. In reducing the call by 783, the Defense Department pointed out it had originally issued its request to Selective Service last February. At that time it used best estimates available on the number of additional physicians who would be needed for the buildup of the armed forces in connection with the Viet Nam war.

* * *

The federal government will conduct a

nationwide survey to determine factors that lead people, particularly older persons, to fall for fakes and swindles in the health field.

Seven agencies of the government are joining in the study which was recommended by the Senate Special Committee on Aging Subcommittee on Frauds and Misrepresentations Affecting the Elderly. The study will include various age groups beginning with teenagers, but it will focus on the elderly.

At hearings of the subcommittee, it was estimated that a billion dollars is wasted each year on misrepresented, unnecessary or worthless health products and services with a large share of such spending by older persons, especially those suffering from chronic and incurable diseases.

There is general agreement among the government agencies involved that this waste of money may be greatly reduced if more



for psychiatric treatment

Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals □ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients

and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction □ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy □ *We will be pleased to provide further information upon request.*

ACCREDITED BY THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

peachtree hospital

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knowledge is available about why people become victims of medical quackery.

The Food and Drug Administration is coordinating the study. Joining with FDA in the survey project are the Administration on Aging; National Institute of Child Health and Human Development; National Institute of Mental Health; and Vocational Rehabilitation Administration—all within the Department of Health, Education, and Welfare; the Agricultural Research Service of the U. S. Department of Agriculture, and the Veterans Administration. A number of voluntary health agencies, the American Medical Association and the National Better Business Bureau helped in planning the study.

The study will seek to determine the influence of such factors as family and educational background, folk medicine customs, and health experiences on consumer attitudes toward health products, services, and information. It will examine the extent to which such factors make some individuals prone to accept false and misleading promotions for health products and services, or resistant to sound medical and health information. Armed with such knowledge, the agencies hope to be able to devise more effective educational and other programs to protect the public against health frauds and quackery.

* * *

HEW Secretary John W. Gardner plans to reorganize the Public Health Service to give the Surgeon General more control over eight new divisions which would replace the present eight.

One of the new eight major divisions would be a National Institute of Mental Health which is now lumped under the National Institutes of Health. The new national institute will include the Fort Worth and Lexington Narcotics Hospitals and will "administer a unified program of research, manpower training, demonstrations and mental health services." Gardner said the institute will "serve as the principal focus for research and control programs in alcoholism

and drug addiction."

The other seven new divisions would be the National Institutes of Health, the Bureau of Health Services, the Bureau of Health Manpower, the Bureau of Disease and Injury Prevention and Control, the National Library of Medicine, the National Center for Health Statistics and Surgeon General's office.

Garner also told a House Commerce Subcommittee that studies are underway to reorganize HEW into a Pentagon-type organization with a super-type secretary over three separate secretaries of Health, Education and Welfare. But he said "now is not the time to act on those proposals."

Gardner's Public Health Service reorganization plan transfers to the secretary all functions of the Public Health Service, the Surgeon General and all other agencies in the service. Gardner called the present structure of the Public Health Service "obsolete." He pointed out it was unchanged since 1943 when the service had a budget of \$52 million compared to the present budget of \$2.4 billion.

* * *

Water pollution control activities of the federal government now are under the Interior Department.

The shift from the Department of Health, Education and Welfare became official when Congress didn't veto President Johnson's reorganization request for the move. Johnson predicted the federal government "now is better organized to carry out concerted action against the pollution that blights America's waters."

Interior Secretary Stewart Udall promptly issued guidelines to the states for setting water quality standards designed "to make rivers as clean as possible," instead of "as clean as permissible."

Udall outlined the department's goal as a federal-state approach to assure a national supply of clean water necessary for health and economic growth.

DON'T MISS 9th ANNUAL MEDICAL PROGRESS ASSEMBLY

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A Clinically Oriented Program To Bridge The Gap
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Authorities From Coast To Coast Are Invited

Program includes Speakers of Annual
Meeting of Alabama Diabetes Association

September 18, 19 and 20, 1966

Some of Participants

Dr. Gene H. Stollerman
Professor and Chairman
Department of Medicine
University of Tennessee
Memphis, Tennessee

Dr. I. Snapper
Dept. of Medicine
Brooklyn V. A. Hospital
(Formerly Director of Medical
Education, Beth-El Hospital)
Brooklyn, N. Y.

Dr. Denis Cavanagh
Professor and Chairman
Department of Obstetrics & Gynecology
St. Louis University
School of Medicine
St. Louis, Missouri

Dr. William T. Fitts
Professor Surgery, Graduate School
University of Pennsylvania
Philadelphia, Pennsylvania

Dr. Bruce H. Stewart
Urology Department
Cleveland Clinic
Cleveland, Ohio

Dr. James W. Harkness
Professor of Orthopedics
University of Georgia Medical College
Augusta, Georgia

Dr. Edward B. Shaw
Professor and Head of Dept. of Pediatrics
University of California School of Medicine
San Francisco, California

Dr. Luigi Mastroianni, Jr.
Professor & Chairman
Dept. of Obstetrics & Gynecology
University of Pennsylvania School of Medicine
Philadelphia, Pennsylvania

Dr. Calvin J. Dillaha
Professor & Chairman
Department of Dermatology
University of Arkansas School of Medicine
Little Rock, Arkansas

Dr. Rudolph E. Noer
Professor & Chairman
Department of Surgery
Louisville Medical College
Louisville, Kentucky

Dr. Tyra Hutchens
Professor & Chairman
Department Clinical Pathology
University of Oregon Medical School
Portland, Oregon

Dr. John Conley
Div. of Head & Neck Surgery
Facial Plastic Surgery
Pack Medical Group
New York, New York

SPEAKERS SPONSORED BY ALABAMA DIABETIC ASSOCIATION (FOR SUNDAY, SEPTEMBER 18, 1966)

Dr. Laurentius O. Underdahl
President, American Diabetes Association
Head of Clinical Section, Mayo Clinic
Rochester, Minnesota
Dr. Stefan S. Fajans
Professor of Medicine
Medical School, University of Michigan
Ann Arbor, Michigan
Dr. Harvey Knowles, Professor of Medicine
Director of Endocrine and Metabolic Division
University of Cincinnati College of Medicine
Cincinnati, Ohio

Anatomy of
Low Back Pain #1



**the sedentary life
is often the seat of
low back pain**

The human spine is not engineered for prolonged sitting at desks, pianos, typewriters and drafting boards. The stresses set up by the heavy, forward-tilted head and trunk, balanced precariously on an insufficient base, result in strain of the dorsal musculature, particularly at the low lumbar level.

The unusual muscle-relaxant and analgesic properties of 'Soma' make it especially useful in the treatment of low back sprains and strains. 'Soma' is widely prescribed ☐ to relieve pain ☐ to relax muscles ☐ to restore mobility.

Indications: 'Soma' is useful for management of muscle spasm, pain, and stiffness in a variety of inflammatory, traumatic, and degenerative musculoskeletal conditions. It also may act to normalize motor activity in certain neurologic disturbances.

Contraindications: Allergic or idiosyncratic reactions to carisoprodol.

Precautions: 'Soma', like other central nervous system depressants, should be used with caution in patients with known propensity for taking excessive quantities of drugs and in patients with known sensitivity to compounds of similar chemical structure, e.g., meprobamate.

Side Effects: The only side effect reported with any frequency is sleepiness, usually on higher than recommended doses. An occasional patient may not tolerate carisoprodol because of an individual reaction, such as a sensation of weakness. Other rarely observed reactions have included dizziness, ataxia, tremor, agitation, irritability, headache, increase in eosinophil count, flushing of face, and gastrointestinal symptoms.

One instance each of pancytopenia and leukopenia, occurring when carisoprodol was administered with other drugs, has been reported, as has an instance of fixed drug eruption with carisoprodol and subsequent cross reaction to meprobamate. Rare allergic reactions, usually mild, have included one case each of anaphylactoid reaction with mild shock and angioneurotic edema with respiratory difficulty, both reversed with appropriate therapy. In cases of allergic or hypersensitivity reactions, carisoprodol should be discontinued and appropriate therapy initiated. Suicidal attempts may produce coma and/or mild shock and respiratory depression.

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INDEX

THE JOURNAL OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Volume 35

July 1965-June 1966

EXPLANATORY NOTES

Arrangement of Index

- I. Authors
- II. Titles
- III. Association Forum
- IV. Alabama Department of Public Health

I. AUTHORS

B.

- Barnes, Z. B., M. D.—Intestinal Complications of Radiation Therapy, 349
- Barnett, Robert V., M. D.—Amenorrhea and Birth Control Pills, 101
- Brannon, Dabney H., M. D.—Small Bowel Tumors: Report of Four Cases, 611

C.

- Cheraskin, E., M. D., D. M. D., and Ringsdorf, W. M., Jr., D. M. D., M. S.—Homeostasis: A Study in Carbohydrate Metabolism, 173
- Christopherson, William M., M. D.—The Changing Concepts of Early Cancer, 261
- Cox, Charles L., Jr., M. D., F. A. C. S.—Neurovascular Compression Syndrome of the Upper Extremity, 805

D.

- Davis, C. Truman, M. D., M. S.—The Passion of Christ from a Medical Point of View, 811
- Davis, C. Truman, M. D., M. S.—Medicine and the Bible, 1010
- Donald, J. M., Jr., M. D., and Viar, W. N., M. D.—Jejunal Diverticulitis, 705

G.

- Gipson, Amos C., M. D., and Barrett, Joseph E., M. D.—Hepatolenticular Degeneration, 710
- Gipson, Amos C., M. D.—Craniostenosis, 922
- Green, Barry M., M. D., and Derian, Paul S., M. D.—Report of Primary Metallic Fixation in Open Fractures, 433

H.

- Holding, Bruce F., Jr., M. D., and Sullivan, John C., M. D.—Injuries of the Face and Jaws, 521
- Hudson, Henry C., M. D., F. A. C. S.—Acute Renal Failure, 25
- Hudson, Henry C., M. D., and Tingley, John O., M. D.—Primary Amyloidosis of the Bladder, 353

I.

- Isbell, Charles A., M. D.—The Outhouse Kid, 429

J.

- Judge, D. J., M. D., F. A. A. P.—Reflections Concerning Children and Organized Sports, 267

L.

- Lehn, Frank, M. D.—Progress in the Study of Rheumatic Diseases; New Drugs, 21

INDEX TO VOLUME 35

M.

- Marr, James Pratt, M. D.—James Marion Sims, A. B., M. D., LL. D., 1021
- McGee, L. S., Jr., M. D., F. A. C. S.—Abdominal Aortic Aneurysms, 801
- Morgan, Cecil, Jr., M. D.—Urinary Catheter Care and Management, 615

N.

- Nolan, Thomas C., M. D., and Daniel, William A., Jr., M. D.—Clinical Evaluation of a New Preparation Combining Penicillin with Triple Sulfonamide, 913

P.

- Price, James H., M. D., and White, Chester W., Jr., M. D.—Upper Extremity Anesthesia by a Simple Block Technique, 917

R.

- Retan, J. Walden, M. D.—The Status of Clinical Kidney Homotransplantation—Spring, 1965, 183

S.

- Shamblin, James R., M. D.—Pancreatitis: Medical and Surgical Management, 1028
- Smith, William L., M. D.—Mycetism, 269

W.

- Walker, Earl A., M. D.—Posttraumatic Epilepsy, 93
- Word, Buford, M. D.—A Reappraisal of Bartholin's Gland, 515

II. TITLES

A.

- Abdominal Aortic Aneurysms (McGee) 801
- Acute Renal Failure (Hudson) 25
- Amenorrhea and Birth Control Pills (Barnett) 101
- A Reappraisal of Bartholin's Gland (Word) 515

B.

- Bowel Tumors, Small: Report of Four Cases (Brannon) 611

C.

- Changing Concepts of Early Cancer, The (Christopherson) 261
- Clinical Evaluation of a New Preparation Combining Penicillin with Triple Sulfonamide (Nolan and Daniel) 913
- Craniostenosis (Gipson) 922

H.

- Hepatolenticular Degeneration (Wilson's Disease) (Gipson and Barrett) 710
- Homeostasis: A Study in Carbohydrate Metabolism (Cheraskin and Ringsdorf) 173

I.

- Injuries of the Face and Jaws (Holding and Sullivan) 521
- Intestinal Complications of Radiation Therapy (Barnes) 349

J.

- Jejunal Diverticulitis (Donald and Viar) 705

K.

- Kid, The Outhouse (Isbell) 429
- Kidney Homotransplantation, The Status of (Retan) 183

M.

- Medicine and the Bible (Davis) 1010
- Mycetism (Smith) 269

N.

- Neurovascular Compression Syndrome of the Upper Extremity (Cox) 805

P.

- Pancreatitis: Medical and Surgical Management (Shamblin) 1028
- Passion of Christ from a Medical Point of View (Davis) 811
- Posttraumatic Epilepsy (Walker) 93
- Primary Amyloidosis of the Bladder (Hudson and Tingley) 353
- Primary Metallic Fixation in Open Fractures, Report of (Green and Derian) 433

R.

- Reflections Concerning Children and Organized Sports (Judge) 267
- Rheumatic Diseases: New Drugs, Progress in the Study of (Lehn) 21

S.

- Sims, James Marion, A. B., M. D., LL. D. (Marr) 1021

U.

- Upper Extremity Anesthesia by a Simple Block Technique (Price and White) 917
- Urinary Catheter Care and Management (Morgan) 615

III. ASSOCIATION FORUM

- Alabama Heart Association, 506
- A Resolution, 55
- Censorship Rights, 502
- Eldercare Campaign of 1965, 737
- Finney, Dr. J. O., Next MASA President, 735
- Health Sciences Research Building, 362
- Highlights of 1965 Midyear Conference, 409
- House Bills—First Extraordinary Session, 630
- House Bills—Regular Session, 631
- House Bills—Second Extraordinary Session, 636
- House Bills—Third Extraordinary Session, 638
- How the Social Security Law Now Affects Physicians, 359
- Midyear Report, Committee on Legislation, 622
- New President-Elect of MASA, 946
- Picture Report on Annual Session, 947
- Public Law 89-97, 222
- Questions Most Often Asked on Medicare, 997
- Senate Bills—First Extraordinary Session, 630
- Senate Bills—Regular Session, 635
- Senate Bills—Second Extraordinary Session, 637
- 65 Students at Medical College Get Scholarships, 1009
- Standing Committees of MASA, 961
- Symposium on The Child Who Fails to Thrive, 225

IV. ALABAMA DEPARTMENT OF PUBLIC HEALTH

- A Letter of Appreciation, 295
- Ambulances and Emergency Medical Care, 195
- Aquatic Rescue of Injured Personnel, 748
- Continuing TB Threat, The, 1071
- Death of a Mosquito, 34
- Family Planning in Alabama, 135
- Governor Authorizes Health Department to be Responsible for Medicare, 451
- Highlights of 1965, 1065
- "Ice Balls" Constitute Health Hazard, 643
- Important Letter to Presidents of All County Medical Societies, 567
- Radium Survey in Alabama, 860
- Shellfish Laboratories—Why Two?, 939
- Syphilis Epidemic in a Southern Prison, 392

Entire Board Of Directors Pledges Ear Bones To Science

All members, and their wives, of the Board of Directors of the National Association of the Deaf have bequeathed their inner ear structures to ear research scientists.

The donation was cited by Dr. Gordon Hoople, Medical Adviser to the Deafness Research Foundation, as "the most significant and unique contribution ever made by the deaf to the cause of otologic research.

"This unprecedented action on the part of these enlightened leaders of the deaf may well pave the way to reaching new insights into nerve deafness through the example it will set for thousands of the profoundly deaf," Dr. Hoople said.

Medical Center Statistics

The Schools of Medicine, Dentistry, and Nursing had the largest enrollment of all divisions of the University of Alabama Medical Center for the 1965-1966 school year, according to statistics recently published by the Center.

The School of Medicine had a total of 298 full-time students, including seven women. Dentistry had 185 men and four women students while seven men and 165 women were enrolled in the School of Nursing.

The remainder of the 898 medical students were enrolled as follows: 24 in postgraduate dentistry, 118 doing graduate studies, 20 in nurse anesthesia, 19 in medical technology, 39 in radiological technology, six as laboratory assistants, two in cytotechnology, three in blood bank technology, and eight in physical therapy.

In addition, 187 other students are serving internships and residencies.

CHIROPRACTIC NOT ONLY USELESS; IT MAY BE DANGEROUS

Prepared 1966 by the American Medical Association, Department of Investigation

Chiropractic is defined in the dictionary as:

"A system, or the practice, of adjusting the joints, especially of the spine, by hand, for the curing of disease." (Webster's New International Dictionary, Second Edition, Unabridged, 1959).

Chiropractors disagree among themselves on the definition of chiropractic. One group, known as "straights," adhere basically to a strict definition, limiting the scope of practice to manual manipulation of the spine. The International Chiropractors Association (ICA) headquartered in Davenport, Iowa, advances the cause of the "straights." The second group, known as "mixers," advocate the use of modalities such as heat, light, water, electricity, vitamins, colonic irrigation, and other physical and mechanical adjuncts, in addition to spinal adjustments. The American Chiropractic Association headquartered in Des Moines, Iowa, advocates the "mixer" philosophy.

The International Chiropractors Association defines chiropractic as follows:

"The philosophy of chiropractic is based upon the premise that disease or abnormal function is caused by interference with nerve transmission and expression, due to pressure, strain or tension upon the spinal cord or spinal nerves, as a result of bony segments of the vertebral column deviating from their normal juxtaposition.

"The practice of chiropractic consists of analysis of any interference with normal nerve transmission and expression, and the correction thereof by an adjustment with the hands of the abnormal deviations of the bony articulations of the vertebral column for the restoration and maintenance of health, without the use of drugs or surgery. The term 'analysis' is construed to include the use of X-ray

and other analytical instruments generally used in the practice of chiropractic."

The American Chiropractic Association's definition is as follows:

"Chiropractic practice is the specific adjustment and manipulation of the articulations and adjacent tissues of the body, particularly of the spinal column, for the correction of nerve interference and includes the use of recognized diagnostic methods, as indicated. Patient care is conducted with due regard for environmental, nutritional, and psychotherapeutic factors, as well as first aid, hygiene, sanitation, rehabilitation and related procedures designed to restore or maintain normal nerve function."

Forty-seven states impose license limitations on chiropractic, prohibiting chiropractors from prescribing drugs and performing surgery. Three other states—Louisiana, Massachusetts and Mississippi—do not issue even limited licenses.

The medical profession regards chiropractic as an unscientific cult whose practitioners are not adequately trained to diagnose and treat human illness.

The cult of chiropractic originated in 1895 in Davenport, Iowa, when one Daniel David Palmer allegedly cured a janitor's deafness by "adjusting" his spine, thereby "discovering" a new method of "healing." Following Palmer's "discovery," he instituted courses in chiropractic, a name he derived from the Greek, meaning literally "done by hand." The courses in chiropractic eventually evolved into schools of chiropractic, so at one time following World War I, there were several hundred chiropractic schools in existence in the United States. These early schools of chiropractic, many of them short lived, offered Doctor of Chiropractic (D. C.) degrees by mail or in exchange for a few weeks or months of "study." This "study" included for the most part techniques in sales-

manship rather than scientific training, and promoted chiropractic as a cure for every conceivable type of disease. To this day, its cult philosophy of following the precepts of its founder, D. D. Palmer, have not changed appreciably.

The medical profession also contends that the chiropractic concept of disease is unsupported by scientific facts, and that the causes of infectious and other diseases cannot be explained by the chiropractic theory that disease is caused by a subluxation (partial dislocation) in the spinal column.

Patients should entrust their health care only to those who have a broad scientific knowledge of diseases and injuries of all kinds, and who are capable of diagnosing and treating them with all the resources of modern medicine.

In the treatment of a patient, the first step must be accurate and complete diagnosis. An inaccurate diagnosis may give the patient false hope or false security. This oftentimes results in the patient's loss of the chance of cure that early and accurate diagnosis might have given. Since most patients who go to chiropractors do so initially because of back trouble, it should be understood that back pain is a phenomenon that is well known but complicated to explain. It may arise from a variety of disorders, including coronary thrombosis, growth in the lung, a duodenal ulcer, or cancer of the stomach. All pelvic conditions, especially those of the uterus and ovaries in the female, may be accompanied by low back pain. Diseases of the liver, kidneys, bladder, prostate, intestines, etc., also may be causes of low back pain. In some cases, the pain may be severe, in others merely annoying. Effective treatment must be based on accurate, scientific diagnosis.

In many of these health situations, and others, uncalled for manipulation is not only useless but inadvisable. No amount of manip-

ulation will have any beneficial effect on infectious diseases.

Manipulation of the vertebral column also is potentially dangerous and harmful. In an elderly individual suffering from a disease such as osteoporosis, manipulation can produce fractures of the vertebrae. In patients who have a malignant disease of the structure, not only can fractures be produced by manipulation but a dislocation might be caused that is sufficient to cause paralysis.

Manipulation of the neck is particularly dangerous. At the neck level, if sufficient force is exerted in the manipulation to cause a displacement of the vertebrae, the spinal cord may be sufficiently compressed so the patient becomes disabled below the level of the pressure. Following manipulation of the neck, surrounded structures are sometimes so traumatized that the residual pain is far more severe than the original pain for which the patient was manipulated.

Such awareness of the limitations of manipulation or mechanical therapeutics can only come from intensive study of related medical sciences. At times it is necessary for a practitioner to use pain suppressors or other drugs which chiropractors are not legally allowed to utilize, and which require a thorough knowledge of the science of medicine, something in which chiropractors are not trained. A practitioner also should have a thorough knowledge of surgery, to be able to recommend that procedure when it is necessary.

The number of chiropractors in the United States is uncertain. The latest (1960) U. S. census states there are 14,360 chiropractors. The American Chiropractic Association and the International Chiropractors Association, in their literature, claim there are approximately 25,000 chiropractors in the United States.

There are 12 schools of chiropractic in the United States. Not one of these schools of chiropractic is accredited by any recognized

educational accrediting body in the United States.

The American Chiropractic Association "recognizes" nine schools in the United States while the International Chiropractors Association "recognizes" three. One of the three schools "recognized" by the ICA is the Palmer School of Chiropractic in Davenport, Iowa, known to chiropractors as the "Fountainhead of Chiropractic."

The only stated "requirement" for admission to schools of chiropractic is a high school diploma or its equivalent. A recent study of chiropractic school "admission requirements" showed, however, that five of seven schools involved in the study granted admission to applicants who did not even have high school diplomas.

The majority of instructors in most chiropractic schools are not trained or qualified as teachers of the basic sciences, and do not possess college diplomas.

THE ACHING BACK

Health education programs developed to alleviate the problem of low-back pain in industry also benefit the general population in cutting loss of income to workers and their families. In spite of the increasing national trend in the frequency, severity, and cost of industrial back injuries, this tendency has been halted and even reversed through institution of such programs. In one plant, a three-phase program includes a preplacement medical examination to help find the applicant a position for which he is best suited physically. Through an in-safety service program he is instructed in the safe operation of his job. Problems of low-back pain and cases of back injuries receive immediate medical evaluation and early treatment. As a result of the program—similar to others in industry—decreases have been noted in the reported number of back injuries and in the number of days lost due to back injury. (M. Kosiak, M. D., and others: "Backache in industry," *Journal of Occupational Medicine*, February 1966).

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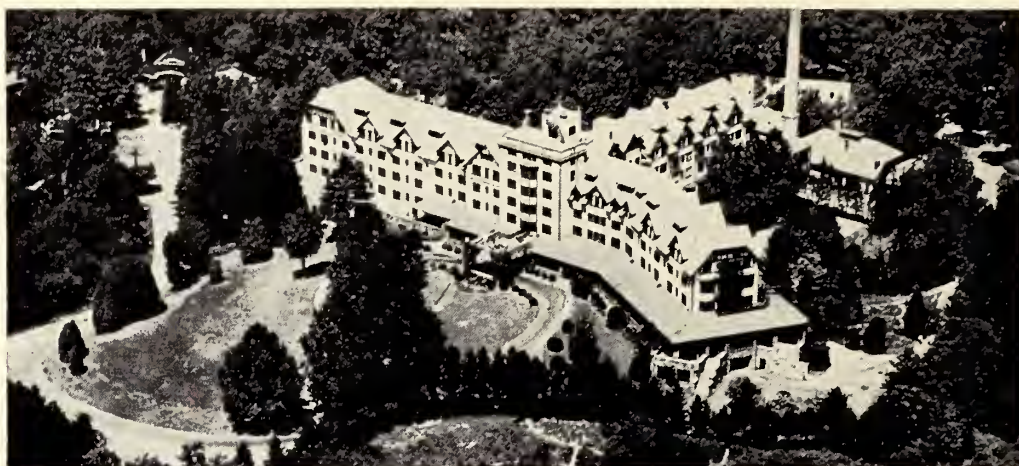
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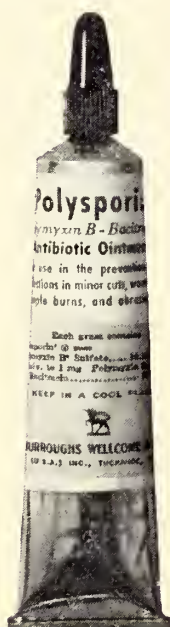
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You might also say that all interns aren't alike, either.



MEDICAL COLLEGE GRADUATES TO BEGIN INTERNSHIPS

Sixty-eight members of the 1966 graduating class of The Medical College of Alabama will soon begin internships throughout the state and nation. The graduates and their hospitals include:

John G. Adams, Cedar Bluff, U. S. Naval Hospital, Charleston, South Carolina; J. Wayne Brannon, Headland, Tripler General Hospital, Honolulu; Joseph N. Cunningham, Marion, Parkland Memorial Hospital, Dallas; W. C. Deavor, Gadsden, U. S. Naval Hospital, Jacksonville, Florida; Richard A. Finch, Mobile, North Carolina Memorial Hospital, Chapel Hill;

C. Bernard Gantt, Emory University Hospital, Atlanta; Edward L. Goldblatt, North Carolina Memorial Hospital, Chapel Hill; W. Rodgers Green, Mt. Vernon, Mobile General Hospital, Mobile; John A. Harris, Mobile, Philadelphia General Hospital, Philadelphia, Pennsylvania;

Thomas M. Harris, Montgomery, U. S. Naval Hospital, Portsmouth, Virginia; J. Max Harrison, Mobile; Mobile General Hospital, Mobile; Tah-Hsiung Hsu, Miaoli, Taiwan, Johns Hopkins Hospital, Baltimore; P. Wayne Kendrick, McCalla, Baptist Memorial Hospital, Memphis, Tennessee; Thomas G. Lamkin, Birmingham, Denver General Hospital, Denver, Colorado;

Joseph W. Lewis, Birmingham, Yale-New Haven Hospital, New Haven, Connecticut; Max W. McCord, Linden, Brooke General Hospital, Fort Sam Houston, Texas; A. Reeves McLeod, Pensacola, University of Florida Teaching Hospital and Clinics, Gainesville, Florida;

John H. Payne, Montgomery, U. S. Naval Hospital, Pensacola, Florida; M. Hulbert Rowell, Theodore, Mobile General Hospital, Mobile; Joseph M. Sachs, Bessemer, University of Virginia Hospital, Charlottesville, Virginia; Marvin B. Shapiro, Columbus, Georgia, Charity Hospital of Louisiana, New Orleans;

Arthur F. Toole, Talladega, Philadelphia

General Hospital, Philadelphia, Pennsylvania; Robert A. Turner, Lanett, North Carolina Baptist Hospitals, Winston-Salem, North Carolina; James D. Wagner, Prattville, U. S. Air Force Hospital, Lackland AFB, Texas.

These members of the class plan to intern at Carraway Methodist Hospital in Birmingham: Charles S. Capra, T. Bradley Fulkerson, David B. Graves, John H. Haley, O. Alan Jared, Richard B. Rubin, Phillip C. Watkins, all of Birmingham; Ernest G. Moore, Tallassee, and James H. Walburn, Greenville.

Those who are scheduled to intern at Lloyd Noland Hospital in Birmingham are Ronald H. Dykes, Montgomery; Louis E. Letson, Scottsboro; Thomas D. McKinnon, Sylacauga; David E. Marley, Brundidge; Charles R. Overstreet, Attalla; John M. Perry, Montgomery; Frank C. Randall, Montgomery; W. David Spruill, Northport; W. Carey Wallace, Sylacauga.

These plan to intern at St. Vincent's Hospital in Birmingham: Donald W. Autry, Bessemer; J. Michael Jasper, Trussville; William G. Moseley, Birmingham; Gary E. Phillips, Samson; Stephen J. Toner, Birmingham; Patrick L. Trammell, Scottsboro.

The following plan to intern at the University of Alabama Hospitals and Clinics in Birmingham: Thomas G. Amason, Jr., Auburn; Jerry D. Dillard, Hartford; W. Fletcher Drewry, Aliceville; Joseph Embry, Knoxville, Tennessee; W. Stuart Foshee, Red Level; Thomas A. Hosty, Montgomery; Terry R. Jones, Clanton; Lynn Koenemann, Dothan; Sheldon Kushner, Montgomery; Harry J. Littleton, Gadsden; R. Burt Prater, Trussville, Douglas L. Rollins, Enterprise;

Joseph R. Stimson, Decatur; William Stonecypher, Vinemont; J. Michael Straughn, Repton; Joseph H. Sugg, Auburn; Allie C. Boyd, Martin D. Palmer, John W. Poynor, Jon E. Sanford, all of Birmingham.

David Hayse Boyd, another member of the graduating class has already begun internship at Lloyd Noland Hospital, Fairfield.

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V., and Dawson, A.:
J. 7:293, 1965.

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Precautions: Advise patients against possibly hazardous procedures until maintenance dosage is established. Though compatible with most drugs, use care in combining with other psychotropics, particularly MAO Inhibitors or phenothiazines; warn patients of possible combined effects with alcohol. Observe usual precautions in impaired renal or hepatic function, in long-term treatment and in presence of depression or suicidal tendencies. Exercise caution in administering drug to addiction-prone patients or those who might increase dosage; withdrawal symptoms, similar to those seen with barbiturates or meprobamate, can occur upon abrupt cessation after prolonged overdosage. Caution should be exercised in prescribing any therapeutic agent for pregnant patients.

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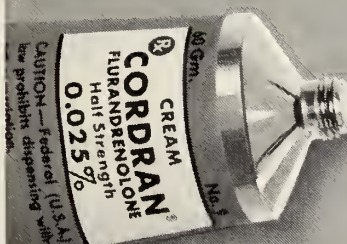
IN THIS ISSUE

Individual Responsibility Program 116

*William H. Sanders, M. D., Early Leader In
Medical Education and Public Health Work . . 139*

*Clinical Study of the Antihypertensive Effects
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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 36 • August, 1966 • No. 2

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price \$5.00 Per Year

\$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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CONTENTS

President's Page 107

The Woman's Auxiliary 110

Editorial Comment 116

Individual Responsibility Program 116

Artificial Heart Valves Questioned 118

Liberty is a Relative Thing 121

Legal Opinions 124

Trade Names, Generic Names, or Both?

Irvine H. Page, M. D. 128

Give Hospital-Based Physicians Support

They Need, Jack W. Baker, M. D. 136

Scientific Section 139

William H. Sanders, M. D., Early Lead-

er in Medical Education and Public

Health Work in Alabama, Ralph C.

Williams, Sr., M. D., Atlanta, Georgia 139

Clinical Study of the Antihypertensive

Effects of Debrisoquin Sulfate in

Combination with Hydrochlorothia-

zide, F. Bernard Schultz, M. D., Au-

burn, Alabama 147

Alabama Department of Public Health 163

Packaged Disaster Hospitals 163

Around the State 172

County Society Meetings 172

Vital Statistics 174

Twenty-Seven Students Receive As-
sistantships 178

First Alabama Rural Health Confer-
ence 180

Obituary 185

Physician Placement Service 206

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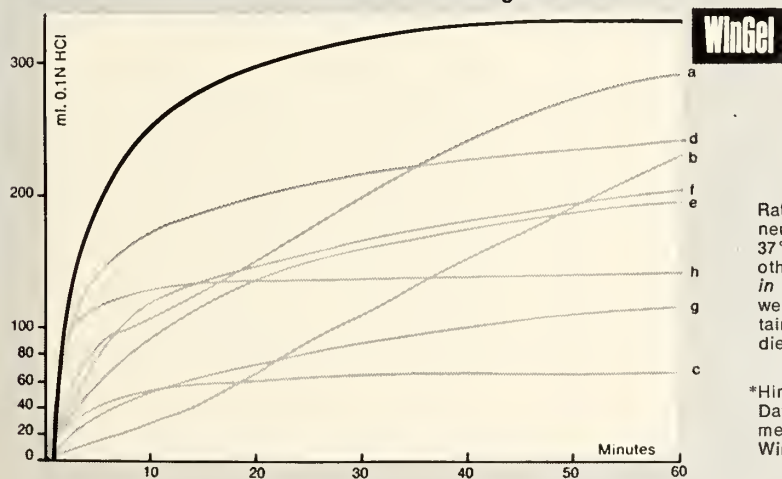
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(1058M)

Behind continued high blood pressure readings lies the possibility of organic damage¹⁻¹³

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.¹

There is one aspect of hypertension, however, that seems, in many cases, predictable. "... when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."¹⁴ All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.



"Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."⁴

"[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."¹⁰

"... most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."¹

"In short, treatment is indicated."¹

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.⁷

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.¹⁴ Essential hypertension is an indication not only for treatment, but for early and adequate treatment of the patient in question.

Reduce the blood pressure with Rautrax-N

Rautrax-N combines the antihypertensive-tranquilizing action of whole root rauwolfia with the antihypertensive-diuretic action of bendroflumethiazide in one convenient medication. The two drugs complement each other

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Rauwolfia combined with bendroflumethiazide is particularly effective in long-term therapy,¹⁵⁻¹⁷ since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

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Contraindications: Severe renal impairment or previous hypersensitivity. **Warning:** Ulcerative small bowel lesions have occurred with potassium containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

Precautions and Side Effects: The dose of ganglionic blocking agents, veratrum or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Caution is indicated in patients with depression, suicidal tendencies, peptic ulcer; electrolyte disturbance are possible in cirrhotic or digitalized patients. Marked hypotension during surgery is possible; consider discontinuing two weeks prior to elective surgery and observe patients closely during emergency surgery. Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression, diarrhea, weight gain, edema, drowsiness may occur. Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients, and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, rashes may occur.

Dosage and Supply: Initial dosage, 1 to 4 tablets daily, preferably at meal time. Maintenance, 1 or 2 tablets daily. Rautrax-N is supplied as capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raidixin®), 4 mg. bendroflumethiazide (Naturetin®), 400 mg. potassium chloride. **Also available:** Rautrax-N Modified — capsule-shaped tablets contain 50 mg. Rauwolfia serpentina whole root (Raidixin), 2 mg. bendroflumethiazide (Naturetin), 400 mg. potassium chloride. Both potencies available in bottles of 100. For full information, see Product Brief.

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President's Page

While attending the recent meeting of the American Medical Association in Chicago I received a copy of ALAPACTION '66. Two days prior to receipt of the ALAPAC news sheet Dr. James Z. Appel, then President of the AMA, and Honorable Richard Nixon, former Vice-president of the United States, addressed the House of Delegates, State Medical Association Officers and guests. Each emphasized the absolute necessity for the development of a strong political action organization to aid us in our battle against further federal servitude. Our ALAPAC, a constituent organization of AMPAC, is charged primarily with developing and maintaining a political climate favorable to the members of the Medical Association of the State of Alabama.

After having heard the stirring speeches by Dr. Appel and Mr. Nixon concerning the need for and goals obtainable through political action by physicians, I was distressed to learn on reading ALAPACTION '66 that the membership role contains the names of only 172 of the approximately 2000 members of MASA. It was upsetting to note that only 24 of our 67 counties were represented in the organization. A few counties have demonstrated fair participation, while in many instances a county is represented by a single member. Had this small group contributed funds over and above the sum considered adequate for an effective program the goals of ALAPAC could not be reached; money alone is not the answer.

ALAPAC will not become an effective tool without wide-spread participation by the members of MASA. Once ALAPAC is known by the politicians to consist of the majority of the physicians in **every** county in the state of Alabama, its voice will immediately become clarion clear, and heard and heeded by the most remote ward-heeler.

The first Political Work-Shop for Doctors



Dr. J. O. Finney

held in Tuscaloosa June 18 was a resounding success. When such a work-shop is held in your area make a determined effort to attend. All of us stand in need of orientation in this enlarging facet of our lives and there is no better way to begin and continue our schooling.

The time for "head in the sand" attitude is long past. We **must** face the issues and defend our goals and purposes. Since the debacle in which we find ourselves today is a direct result of political action we have no recourse other than to fight back with political action—fire to fight fire if you will.

Those of you who, through simple neglect, have failed to become a member of ALAPAC should without further delay mail your check to ALAPAC, Post Office Box 51, Montgomery, Alabama. Those undecided as to the merits of membership in ALAPAC should send a request for detailed information concerning the organization to the same address; don't do yourself the injustice of remaining uninformed on such a vital matter.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "J. O. Finney". The signature is fluid and cursive, with a long horizontal stroke at the end.

J. O. Finney, M. D.
President

*A Key Site of Action of the
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"The main function of the
carotid sinus is regulation of
the blood pressure...."¹

The veratrum component of
Salutensin acts here (and in the
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In mild to moderate hypertension:

Salutensin enhances the body's own mechanisms for lowering blood pressure. The veratrum component of Salutensin acts on the carotid sinus and myocardial receptors, initiating "...a reflex fall in blood pressure through a generalized vasodilation and fall in heart rate."² To achieve this reflex modification of hypertension, Salutensin utilizes protoveratrine A.

In addition, to facilitate and maintain blood pressure reduction, Salutensin incorporates reserpine and a highly effective thiazide. In general, side effects have been

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Available: Prescription-size bottles of 60 tablets.

References: 1. Editorial: JAMA 191:592 (Feb. 15) 1965. 2. Meilman, E., in Moyer, J.H.: Hypertension, Philadelphia, W.B. Saunders Company, 1959, p. 395.

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For complete information consult Official Package Circular.

Indications: Essential hypertension.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

Contraindications: Salutensin is contraindicated in severe depression.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss, which may cause digitalis intoxication, responds to potassium-rich foods, potassium chloride or, if necessary, stopping therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy two weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution with patients with peptic ulcers or renal insufficiency (if severe, Salutensin is contraindicated).

Side Effects: *Hydroflumethiazide:* Purpura plus or minus thrombocytopenia, hyperuricemia, leukopenia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet *b.i.d.*

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Salutensin[®]

Each tablet contains:
protoveratrine A, 0.2 mg.;
hydroflumethiazide, 50 mg.;
reserpine, 0.125 mg.

The Woman's Auxiliary

Alabama's representation at the 43rd Annual Convention of the Woman's Auxiliary to the American Medical Association, Chicago, Illinois, had a week of learning. Basically for the year's program, we are involved with the subjects of the health of children and youth of school age, and on the opposite end of the spectrum, with the incapacitation illnesses and their effect on the aged. Youth may appear to be more demanding, because ours is a youth-focused nation. The unvoiced needs of our eighteen million older citizens have brought a new dimension to medical practice. Their needs and their numbers require that we, who support our physician husbands by serving our communities, assist in providing the services needed for the elders' total care. Our delegation was urged to join in a unified approach to meet proven health needs.

Each representative could feel pride in our Alabama Auxiliary, because of the national level offices held by Mrs. W. G. Thuss, Sr., and Mrs. John Chenault. Louise Thuss was on the By-Laws Committee and spent many profitable hours on formulating amendments to the Constitution. Belle Chenault served as Chairman of Nominating Committee and handled her job expertly. Your presidential delegate served on Resolutions Committee, and the resolution for Woman's Auxiliary to give complete co-operation to the AMA on its administration and recruiting program for Project Viet Nam was accepted. State Delegates consisted of: Chairman Mrs. William G. Thuss, Sr., Birmingham; President-Elect Delegate Mrs. James C. Guin, Jr., Tuscaloosa; Delegate Mrs. Howard C. Johnson, Sheffield; Delegate Mrs. R. K. Wilson, Aliceville. Alternates selected were: Mrs. M. Vaun Adams, Mobile; and Mrs. E. Bryce Robinson, Birmingham. Presidential Delegate: Mrs. Ira B. Patton, Oneonta.

In answer to the question, "What phase of the convention impressed you most?" Mrs. James C. Guin replied, "The state and na-



Mrs. Ira B. Patton

tional reports were most interesting and inspiring; however, if I can name only one, I think it's the friendly co-operative manner in which 259 state delegates from 50 states representing 90,000 members worked together toward a common goal. It is ladies such as these that renew my faith in the future, and assure me that one day we shall *reclaim the American dream.*"

Mrs. R. K. Wilson's reply "The reports of the Auxiliary presidents interested and inspired me most. Being confined to three minute oral reports necessitates the selection of outstanding projects, and these were presented concisely. A cross section of the accomplishments of Auxiliaries throughout the nation were portrayed in these reports. Excellent ideas and suggestions were gleaned, and it is evident that in various ways, Auxiliaries have been cultivating friendly relations, and promoting mutual understanding among physicians' families. It was apparent

that in Auxiliaries in which one area of service was selected and that project followed through, the *most successful work* was accomplished."

Alabama Auxiliary members because of your generous AMA-ERF contributions through an energetic, capable chairman Mrs. B. H. Johnson of Bessemer of \$11,632.00 with a 15 per cent gain over last year we won an Award of Merit, a wooden plaque in the shape of the State of Alabama with a metal front inscribed:

American Medical Association Education
and Research Foundation
Award of Merit
Presented to the
Woman's Auxiliary to the

Medical Association of the State of Alabama
June 28, 1966 Raymond J. McKeown, M. D.

Condensed report of 1965-66 under presidency of Mrs. James L. Crenshaw given to the national convention consisted of: Alabama gained three new counties in membership, and each member receives our quarterly publication of "WAMASA News." International Health continues to be one of the most appealing projects for local Auxiliaries. A total of 1,521 pounds of drugs and 111 hospital gowns was sent to World Medical Relief, and more drug donations were given to local organizations. Project Hope was also supported. Volunteer services were many in the Rural Health program by our members serving in the rural nursing homes. This committee worked closely with State Health Department on Tuberculosis and Histoplasmosis Survey in rural areas.

Special emphasis was placed upon Health Careers this year, and we had the aid of the Health Careers Council of Alabama whose purpose is to expand and coordinate activities in the area of education about health career opportunities and recruitment of people into health careers and health work. This committee was written up in the March 28th, 1966, issue of the American Medical Association

Newsletter. Quote—"Health Careers Book Available to Student." "Alabama high school students will receive assistance in choosing a career in the health field through a 70-page book being published by the Committee on Health Careers of the Woman's Auxiliary to the Medical Association of the State of Alabama and the state's Health Career Council." The book entitled "Health Careers in Alabama" contains data on 55 health career fields, giving personal and educational qualifications, approved schools, tuition, and available loans and scholarships. We have already received requests from physicians as a result of this article. Our Auxiliaries were responsible for 2,032 copies of this booklet being distributed.

A committee on Paramedical Education is in the process of being appointed to provide assistance in the development of paramedical programs in the new Junior Colleges.

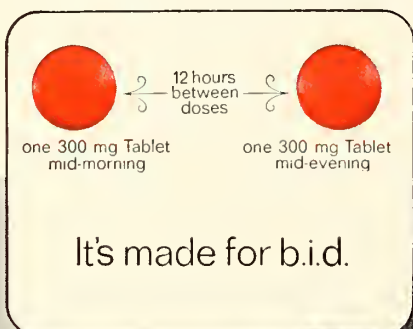
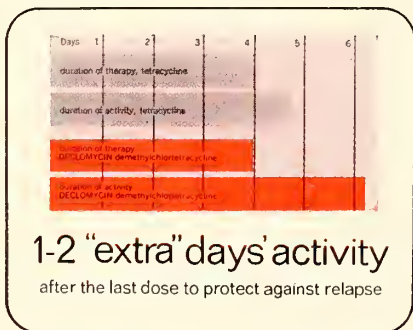
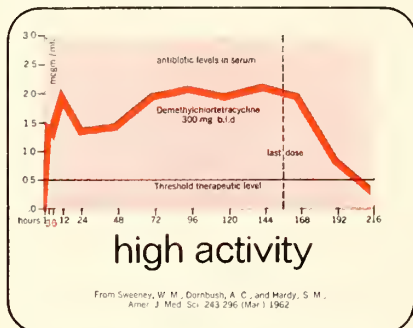
We have had a busy year, and sincerely hope that through our efforts something of substantial value has been contributed to the *Medical Association of the State of Alabama*, the *general public*, and the future of *American Medicine*.

My desire is to see more Alabama doctors and their wives attend National Convention. Ladies, the social activities were grand, two receptions with hors d'oeuvre table lavish with ice designs, wonderful delicacies and flowers. Monday's luncheon honored representatives from prominent national women's volunteer organizations, with an outstanding writer of the book "Reclaiming the American Dream" and an editorial consultant to Reader's Digest as our guest speaker, Mr. Richard C. Cornvelle executive vice president in charge of program development of the National Association of Manufacturers. Tuesday's luncheon featured Dr. James Z. Appel, President of AMA as our speaker. A "Nite on the Town" Tour with Prime Rib of Beef dinner—Ivanhoe Restaurant, Banjo Review at Red Garter, browsing in Old Town and the Ice Revue at Conrad Hilton Hotel

(Continued on Page 115)



greater potency
lower mg intake per day
600 mg versus 1,000 mg



in G.U. infections
broad-spectrum performance

DECLOMYCIN[®] DEMETHYLCHLORTETRACYCLINE

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; **Tablets:** film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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ERYTHROMYCIN ETHYL SUCCINATE-TRISULFAPYRIMIDINES



in
chewable
tablets

in granules
for oral
suspension

When combination antibiotic
therapy is indicated...



CONSIDER: an exceptionally high cure rate in susceptible infections

The rationale: When combined, Erythrocin and the trisulfapyrimidines (triple sulfas) are indicated in infections that are more susceptible to the combination than to either agent alone. Such conditions are usually found in urinary, lower respiratory tract and chronic ear conditions.

The results: Clinical studies involving 142 young patients showed *an overall cure rate of*

96.5%. Side effects were experienced by only four of the patients.

The acceptance: The majority of the 142 patients studied expressed a definite liking for the products. *There were only two refusals.* An independent taste-test with 50 healthy children further substantiated the excellent acceptability of the orange-flavored forms.

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ERYTHROCIN[®]-SULFAS

ERYTHROMYCIN ETHYL SUCCINATE-TRISULFAPYRIMIDINES

In Chewable Tablets
In Granules for Oral Suspension



ERYTHROCIN-SULFAS

Brief Summary

Indications: Use Erythrocin-Sulfas in infections more susceptible to the combination than to either agent alone. These are usually found in urinary, lower respiratory tract, and chronic ear infections.

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or new born infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions: Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

If a reaction or overgrowth of nonsusceptible organisms occurs, withdraw the drug.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. each of sulfadiazine, sulfamerazine and sulfamethazine. 603303



WOMAN'S AUXILIARY

(Continued from Page 111)

was quite entertaining. One who enjoyed the AMPAC dinner had Art Linkletter as guest entertainer. An AMA Medicine and Religion Program was given Sunday night. Dr. Earnest Howard, AMA gave the Auxiliary an AMA Round-Up. In brief he explained to us what resolutions AMA House of Delegates passed. Written en route home, thanks for the opportunity of representing our organization.

Mrs. Ira B. Patton

Mrs. Ira B. Patton

President WAMASA



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INDIVIDUAL RESPONSIBILITY PROGRAM

There is extensive activity throughout organized medicine to promote the Individual Responsibility Program—abbreviated I. R. P. The AMA, the American Academy of General Practice, and State and County Medical Societies scattered through the country, have approved I. R. P. and recommend it to American physicians. It has even been said by many that any other approach by the physicians is unethical. This is based on Section VI of the Principles of Medical Ethics of the AMA which reads: "A physician should not dispose of his services under terms or conditions which tend to cause a deterioration of the quality of medical care."

P. L. 89-97 (Medicare) specifically allows a physician to bill his patients by the "direct billing" procedure. To do otherwise subjects a physician to all of the control of the law, not the least of the consequences of which is acceptance of the fee set by H. E. W. or its intermediary. Remember that in many cases the agreed-upon fees under the first "Medicare" (services to military dependents) were rapidly lowered as new contracts were negotiated.

What is I. R. P.? Simply, it means that the physician bills his patients as usual. He furnishes the participants of medical care insurance (private or governmental) a simple itemized statement. This can be the standard I. R. P. form adopted by Texas. The physi-

cian collects from the patient, and the patient collects from the third party.

What is the alternative for the physician who does not adopt I. R. P.? He must accept a consignment. The third party pays whatever part is covered by insurance. The physician must collect the difference from the patient. The obvious advantage of this approach is that the physician is assured at least a part of his fee. "Take the cash and let the credit go," is an old saying. The accurate quote of the original is:

"How sweet is mortal Sevranty!—think some
others—'How blest the Paradise to come!'
Ah, take the cash in hand and waive the
Rest;
Oh, the brave music of a distant drum!"
(Verse XII, Rubaiyat of Omar Khayyam)

But remember that Verse XI says in part, "And wilderness is Paradise enow."

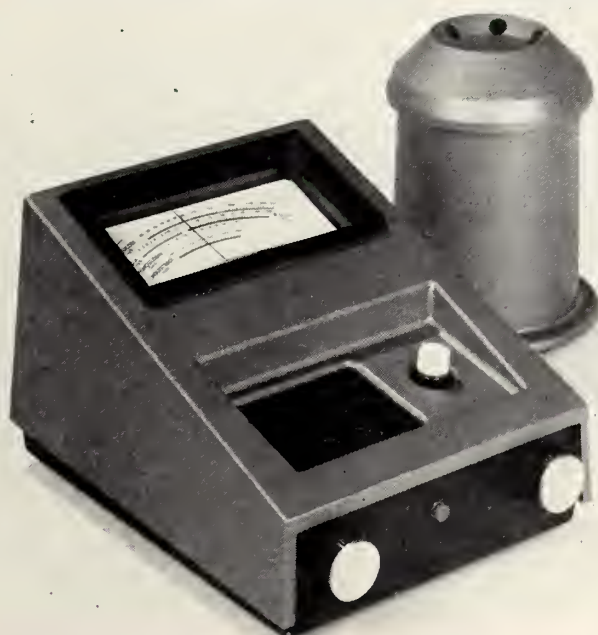
It seems that I. R. P. is the moral, ethical, legal and desirable course for the physicians. Just how unmoral and unethical (it is not illegal) is it for a physician to follow the alternative plan? This is surely a matter of opinion, especially as to degree. The moral purists were not heeded when the first "Medicare" became law. Thousands of phy-

(Continued on Page 118)

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FIVE BASIC BIOCHEMICAL TESTS . . .

HEMOGLOBIN, GLUCOSE, CHOLESTEROL, BUN, URIC ACID



If you are interested in performing the five basic blood chemistries. **With . . .** Only a few seconds working time per test. **With . . .** Results in thirty minutes or less. **With . . .** The accuracy that only a colorimetric procedure can give you. **Without . . .** An increase in personnel. **Without . . .** Making room for bulky equipment. **Without . . .** Training Problems.

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<input type="checkbox"/>	Please send literature.
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Address	
City	State

(Continued from Page 116)

sicians throughout the nation work under contract. More accept patients covered by service contract insurance. Yes, the degree is debatable. But now the physician is faced for the first time by government control of his patient, his practice, his life. In the physician-patient relationship three is surely a crowd.

The mighty dollar, or its equivalent, is usually the germ that contaminates the moral and the ethical. The physician is human, after all is said of his oaths and ethics. He must place the health and well being of his patient first, but he is negligent to himself and his family if he does not make his work remunerative. He is negligent to the future if he does not strive to keep the practice of medicine free. His only higher

obligation is to his God.

"Medicare" in some form seems here to stay. How the majority of physicians feel surely is expressed poetically by another verse from the Rubaiyat:

"Oh, Love! could thou and I with Fate conspire

To grasp this sorry scheme of things entire,
Would not we shatter it to bits—and then
Re-mould it nearer to the Heart's Desire."

(Verse LXXIV)

The adoption of the Individual Responsibility Program is voluntary. Each physician must decide for himself. For many this will be easy. For a few it will be most difficult. It is possible to make a change from I. R. P. to the alternative. But the reverse may be either difficult or impossible.—W. L. S.

ARTIFICIAL HEART VALVES QUESTIONED

Two prominent surgeons have called for a hard second look at the use of artificial heart valves.

While acknowledging the value of artificial valves in extreme cases, they say that the valves have been overused.

Sir Russell Brock, president of the Royal College of Surgeons, advocates more use of heart valves transplanted from cadavers. It may even be possible to transplant heart valves from other animals, he suggested.

Charles P. Bailey, M. D., director of thoracic and cardiovascular surgery at St. Barnabas Hospital, New York City, has led research in repairing existing heart valves with other tissue from the patient's body. This may prove more successful than artificial valves, he said.

Artificial heart valves haven't been in use long enough to evaluate their long-term survival rate, Dr. Bailey said. Nevertheless, failure rates as high as 37 per cent within 12 months after implantation have been reported.

Valve-repair techniques at least equal the survival rate of artificial heart valves, and should be expected to surpass it, Dr. Bailey said.

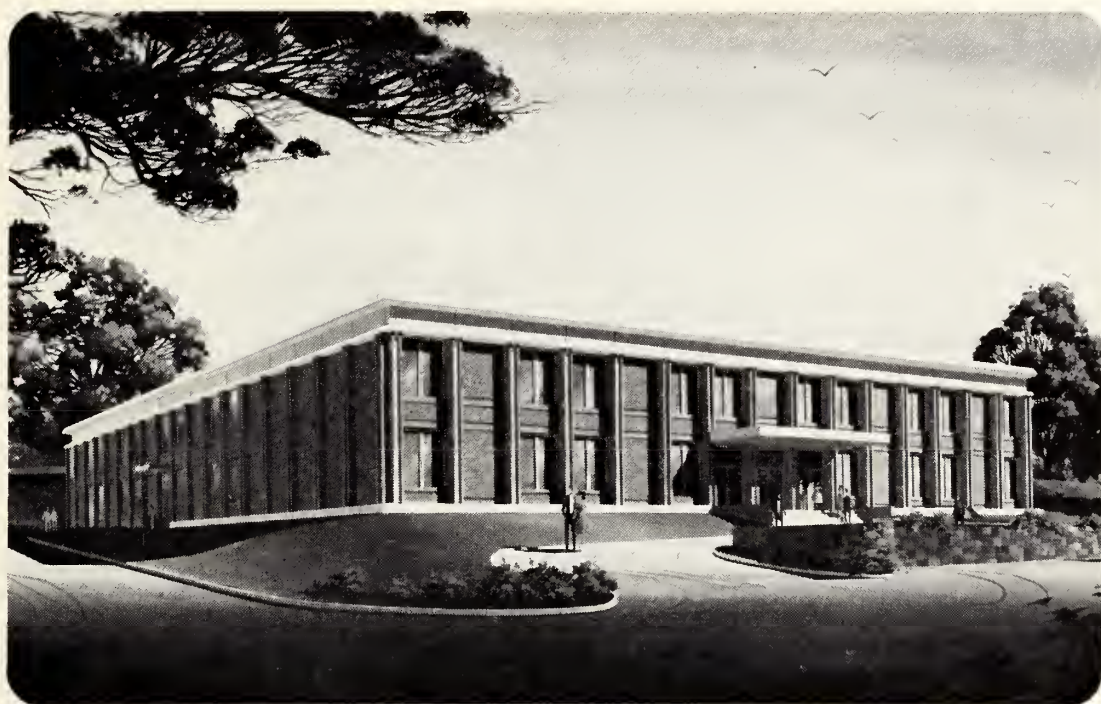
"Obviously, when a patient has no future without an operation, valve (removal) is not only justifiable, but can be a brilliant, worthy and highly commendable form of treatment," Sir Russell said. "There is, however, much evidence that the limitations of valve (removal) and replacement are often totally ignored."

Sir Russell's principal objection to the artificial valve is that it represents too radical a departure from the shape of the natural valve. He questions whether an artificial valve will be long tolerated by the body.

Improvements in cadaver-valve transplantation techniques have produced excellent results with low death rates," he said.

At Guy's Hospital in London, where Sir Russell is director of cardiology, the aortic

(Continued on Page 120)



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

PARKWOOD HOSPITAL

1999 Cliff Valley Way, N.E. / Atlanta, Georgia 30329 / Phone 634-5166 (404)

(Continued from Page 118)

valves of more than 100 patients have been replaced with valves from cadavers. The earliest of these patients has now survived 3½ years.

While agreeing that the artificial valve has limited use, Dr. Bailey differed somewhat on alternative procedures. He favors reconstructing the original valve with other tissue from the patient's body.

There have been complications in replacing sections of artery with sections from cadavers, and these complications probably apply to the more difficult task of heart-valve replacement, he said.

In addition, it is difficult to obtain an adequate supply of cadaver heart valves, Dr. Bailey said.

Sir Russell agreed that supplying a variety of heart valve sizes from cadavers is difficult.

"The solution may lie in the use of heterograft valves (from other animals), and we should not turn lightly from developing their wide use unless, it is shown that they are not satisfactory on immunological grounds," he said.

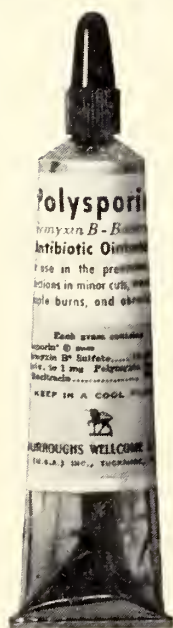
With further experience, the need for artificial heart valves may be reduced to only occasional aged and terminally ill younger patients, Dr. Bailey said.

The great wave of enthusiasm for artificial heart valves in recent years should not blind the surgeon to the fact that it is, in reality, a great human experiment, Sir Russell warned.

"It can be argued very reasonably that it is an investigation that has to be made, an experiment that has to be tried. This is entirely justifiable if we remember that it is an experiment, a deliberate, widespread human experiment," he said.

Connecticut Medicine, June, 1966

in treating topical infections, no need to sensitize the patient



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**broad-spectrum antibiotic
therapy with minimum risk
of sensitization**

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **Contraindication:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: In ½ oz. and 1 oz. tubes

Complete literature available on request from Professional Services Dept. PML.



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LIBERTY IS A RELATIVE THING

Let the word go forth from this time and place to friend and foe alike
That the torch has been passed to a new generation of Americans.
Let every nation know—whether it wishes us well or ill—
That we shall pay any price, bear any burden,
Meet any hardship, support any friend, oppose any foe
To assure the survival and the success of liberty.

Now the trumpet summons us again—
Not as a call to bear arms, though arms we need;
Not as a call to battle, though embattled we are—
But a call to bear the burden of a long twilight struggle,
A struggle against the common enemies of man:
Tyranny, poverty, disease, and war itself.
In the long history of the world
Only a few generations have been granted
The role of defending freedom in its hour of maximum danger.
I do not shrink from this responsibility; I welcome it.
The energy, the faith, the devotion which we bring to this endeavor
Will light our country and all who serve it,
And the glow from that fire can truly light the world.

And so my fellow American, ask not what your country can do for you;
Ask what you can do for your country.
My fellow citizens of the world, ask not what America will do for you,
But what together we can do for the freedom of man.
With a good conscience our only sure reward,
With history the final judge of our deeds,
Let us go forth to lead the land we love,
Asking His blessing and His help,
But knowing that here on earth God's work must truly be our own.

The words above are being laboriously carved into slabs of pink marble quarried from a windy island in Maine's Penobscot Bay. Soon they will be erected at the grave-site of John F. Kennedy on a grassy slope at Arlington Cemetery overlooking the nation's capitol.

These were the words—a clarion call to action—spoken dramatically by a young man upon the occasion of his inauguration as President on a miserably cold and rainy January day in 1961. In simplicity and eloquence they rank close to Lincoln's Gettysburg Address. For men who cherish freedom they are an inspiration.

But liberty is a relative thing. One man's freedom can be another man's enslavement. To abolish absolutely every restraint imposed by the requirements of civilization would bring chaos to mankind.

Tyranny, poverty and disease are listed by the speaker as three of the common enemies of man. And so they are. To conquer one, or all, should be every man's goal in life.

But let us exercise caution in making our battle plans, that we assault our enemies in the order of their importance. Let tyranny be our first objective and attacked wherever it exists—whether within the vested interests, the administrative arm of government, the legislatures, or the judiciary.

Let us never assault poverty, as the Communists have done, simply by robbing the rich and distributing their wealth among the poor.

Nor can we conquer disease by enslaving or nationalizing the medical profession.

Practitioners of medicine, in America and

(Continued on Page 122)

(Continued from Page 121)

throughout the world, have more than a pecuniary interest in current campaigns to establish intervenors between the physician and those who entrust to him their lives, and those of their loved ones.

It would be well for every physician to carefully relate the Kennedy inscription to his own profession and spheres of interest. Perhaps then he will unite with other physicians, and other men of honor and integrity, in a common fight against all of mankind's enemies.

New Film To Help Solve Physician Shortage

A new motion picture designed to help alleviate the critical doctor shortage is in production here for the American Academy of General Practice (AAGP).

"Someone You Can Trust—Someone You Can Be," a 28-minute color film, will encourage high school students to consider a career as a medical doctor. The film is being produced by Smith Kline & French Laboratories, the Philadelphia pharmaceutical firm.

According to AAGP Executive Director Mac F. Cahal, "Someone You Can Trust—Someone You Can Be" is but a part of an on-going effort to help solve the physician shortage facing this country. Cahal points to some statistics that reveal the extent of the problem.

"In 1900, there were 150 doctors for every 100,000 population; today there are but 130," Cahal said. "Despite the fact that each day headlines proclaim new medical miracles, nearly 20 per cent of the medical internships available at U. S. hospitals go unfilled each year. Medicare and other government health

programs will further increase the need for trained physicians."

AAGP started medical career stimulation activities in 1961 with its Project MORE, a widely successful program that has been responsible for greatly increased efforts of this kind by the entire profession. Project MORE, which is implemented by physicians in their local communities, now has been incorporated into a broader program called Family Practice Careers. The new program covers college pre-med and medical school as well as high school. Its goal is attracting more young doctors into family medical practice.

Smith Kline & French Laboratories has been making prize winning medical films for more than a decade. Its film on mental illness, "The 91st Day", won numerous awards following its premiere on nationwide educational television in 1963.

"Someone You Can Trust—Someone You Can Be" was filmed by Calvin-DeFrenes Corporation of Philadelphia. It was directed by Richard Bulkeley. Script was written by David Bowen.

To Label Is To Communicate

There is much to be gained in most instances by labelling the nature of the medication. Patients are bombarded on all sides by medical information; their approach to medical care is much more sophisticated than that of their parents. The growth of effective pharmaceutical agents has been such that three or four types of medication may be indicated for the management of a single problem. Labelling promotes better medical care rather than detracting from it. Labelling also promotes more effective communication between the patient and the physician.—E. Clinton Texter, Jr., M. D., *Illinois Medical Journal*, (129:270), March 1966.

anatomy of
Low Back Pain #1



**the sedentary life
is often the seat of
low back pain**

The human spine is not engineered for prolonged sitting at desks, pianos, typewriters and drafting boards. The stresses set up by the heavy, forward-tilted head and trunk, balanced precariously on an insufficient base, result in strain of the dorsal musculature, particularly at the low lumbar level.

The unusual muscle-relaxant and analgesic properties of 'Soma' make it especially useful in the treatment of low back sprains and strains. 'Soma' is widely prescribed ☐ to relieve pain ☐ to relax muscles ☐ to restore mobility.

Indications: 'Soma' is useful for management of muscle spasm, pain, and stiffness in a variety of inflammatory, traumatic, and degenerative musculoskeletal conditions. It also may act to normalize motor activity in certain neurologic disturbances.

Contraindications: Allergic or idiosyncratic reactions to carisoprodol.

Precautions: 'Soma', like other central nervous system depressants, should be used with caution in patients with known propensity for taking excessive quantities of drugs and in patients with known sensitivity to compounds of similar chemical structure, e.g., meprobamate.

Side Effects: The only side effect reported with any frequency is sleepiness, usually on higher than recommended doses. An occasional patient may not tolerate carisoprodol because of an individual reaction, such as a sensation of weakness. Other rarely observed reactions have included dizziness, ataxia, tremor, agitation, irritability, headache, increase in eosinophil count, flushing of face, and gastrointestinal symptoms.

One instance each of pancytopenia and leukopenia, occurring when carisoprodol was administered with other drugs, has been reported, as has an instance of fixed drug eruption with carisoprodol and subsequent cross reaction to meprobamate. Rare allergic reactions, usually mild, have included one case each of anaphylactoid reaction with mild shock and angioneurotic edema with respiratory difficulty, both reversed with appropriate therapy. In cases of allergic or hypersensitivity reactions, carisoprodol should be discontinued and appropriate therapy initiated. Suicidal attempts may produce coma and/or mild shock and respiratory depression.

Dosage: Usual adult dose is one 350 mg. tablet three times daily and at bedtime.

Supplied: Two Strengths: 350 mg. white tablets and 250 mg. orange, two-piece capsules.

Before prescribing, consult package circular.

**for the relief
of low back
sprains and strains**

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(CARISOPRODOL)



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Judgment For Chiropractor In Paralysis Suit Reversed

A judgment entered on a jury verdict in favor of a chiropractor in a suit for damages against him by a patient who became paralyzed, allegedly as the result of negligent treatment on the chiropractor's part, was reversed and a new trial ordered by a Tennessee intermediate appellate court. The trial court committed reversible error with respect to the admission of evidence and its instructions to the jury.

The patient consulted the chiropractor about a strain of his neck and shoulder muscles which he had sustained in lifting a heavy weight. On the basis of his examination, the chiropractor diagnosed the condition as a subluxation of the atlas and axis vertebrae. He administered a specific adjustment of the atlas vertebra and a "tocal recoil adjustment" every day for a week. He gave the last set of treatments even though the patient told him before he did so that he was losing the use of his legs and felt some numbness and tingling in them. Shortly after the last treatments, the patient completely lost the use of his legs. He was treated by several physicians, but he is now paralyzed from the waist down. There was testimony that the paralysis was permanent.

The trial court did not err in directing a verdict for the chiropractor on the count alleging that he had been negligent in that he had exceeded the limits of his license in treating the patient. The evidence established that he gave the patient no drugs and treated no part of his body other than his spine. There was nothing in the statutory definition of chiropractic which prohibited him from treating a patient with paralysis so long as he believed, in good faith, that a manipulation of the spine would benefit the patient. The field of the physician and the chiropractor overlap here, the court said.

Testimony of physicians who were medical experts for the patient that the chiropractor had stepped outside his field in attempting to treat the paralysis was also properly excluded.

The trial court did not err in permitting a physician who testified as a medical expert for the chiropractor to state the opinion that the patient's paralysis was due to spinal meningitis and that he would gradually regain a great deal of his mobility. The witness had not treated the patient. His opinion was based, not on any subjective symptoms of the patient, but on his examination of the patient and of the records and charts of the physicians who had treated him.

The trial court erred in refusing to permit the physicians who treated the patient to testify to their opinion that the patient's paralysis was caused by a blood clot which was brought about by the pressure exerted by the chiropractor in his treatment. The evidence was improperly excluded, even though the physicians were not familiar with the techniques and methods employed by a chiropractor, since both physicians and chiropractors are concerned with treatment of the spine.

The trial court erred in refusing to instruct the jury that: the chiropractor had the duty to advise the patient that any treatment he could give would be of no benefit, if he knew this to be so, to discontinue his treatment, and to advise the patient to seek other treatment; the patient had a right to recover, even if he had a disabling back injury or congenital back weakness when he consulted the chiropractor, if negligence on the chiropractor's part was the proximate cause of an aggravation of that condition.

Ison v. McFall, 400 S. W. 2d 243 (Tenn., March 26, 1964; cert. denied, Sept. 4, 1964)

Postmortem Findings Two Days After Death Admissible

In a prosecution against an accused on a charge of murder, a trial court did not err in permitting an assistant coroner to testify as to his findings in a postmortem examination of the victim's body made two days after the killing, the Alabama Supreme Court ruled.

The witness stated that the victim had 18 stab wounds in her back and that they and the loss of blood caused her death. The accused testified that he had stabbed the victim twice and denied he stabbed her in the back.

The accused contended that the assistant coroner's testimony should not have been admitted because no showing had been made that the body was in the same condition when he made the examination as it was immediately after the killing. The mere fact that the postmortem examination was made long after death was not, in itself, sufficient reason for excluding testimony as to its results from evidence, the court said.

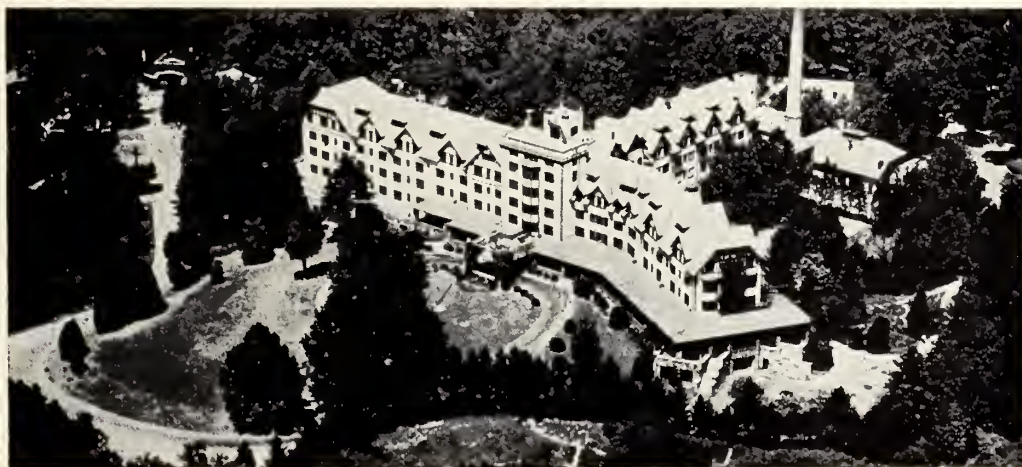
Kemp v. State of Alabama, 179 So.2d 762 (Ala., Sept. 30, 1965; rehearing denied, Nov. 18, 1965)

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An institution for the diagnosis and treatment of psychiatric and neurological illnesses, rest, convalescence, drug and alcohol habituation.

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Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

**When
thiazide
or
reserpine
alone
won't
keep**

**BLOOD
PRESSURE
SURE
DOWN**

Establish and maintain early, more decisive control of blood pressure

DIUTENSEN-R®

Cryptenamine 1.0 mg.* Methyclothiazide 2.5 mg. Reserpine 0.1 mg.

When blood pressure won't stay down despite initial therapy — when complaints of headache, fatigue or dizziness are often voiced — it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine *plus* cryptenamine — a rational, comprehensive therapy to help establish and maintain early, more decisive control of blood pressure.

The cryptenamine in DIUTENSEN-R helps improve normal vasodilating reflexes while the thiazide and reserpine components maintain vasorelaxant, sedative, and saluretic benefits. Cryptenamine lowers pressoreceptor reflex thresholds (which may be abnormally high in hypertension) — “resets” pressoreceptors to function at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

“... quite apart from the problem of vascular damage, there arises a possibility of virtual ‘cure’ or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive.”

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice* 1966-67, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals.

However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars. **Side effects and**

precautions: The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout symptoms and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon. DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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TRADE NAMES, GENERIC NAMES, OR BOTH?

Irvine H. Page, M. D.

There is only one purpose in a name—to identify the object. If the name is to stick and be readily adopted, it should be euphonious, easily pronounceable, easy to spell, and easy to remember and should indirectly indicate something of the object's nature or use. Physicians, to their great misfortune, have been burdened with not two but three names for one drug—the trade name, the generic name, and the chemical name. So we have Atromid®, clofibrate, and ethyl-alpha-chlorophenoxy-isobutyrate—all relatively simple but illustrative of our clumsy nomenclature.

Clearly the chemical name is of no use to most physicians, which limits the problem to using one or possibly both of the other two names. This is one of those odd problems that has generated a lot of heat and should be discussed by those of us old enough for free drugs under Medicare and hence less prejudiced.

First, we must decide whether or not we really believe in capital, profit, and competitive business. Clearly, many people do not, and these are mostly the *Washington-centric* group. But selling drugs is a business and must pay its way. Because drugs are used to allay human misery does not mean that the drug business should be handled by totally different rules.

Since about half the drugs in use are protected by patents, the problem does not arise with them. The drug industry spent \$351 million on new drug research in 1965, and it is estimated that the average cost of bringing a single new drug to the market is about \$5 million. As every physician knows, the number of failures is legion. It is self-evident under our system that patents are both reasonable and necessary.

For the remaining drugs, is a trademark or

trade name necessary, or even desirable? History says yes because even in Egypt a slave put his own mark on every brick so his master would know who to punish in case! In 1266, English law required bread loaves to be marked, so if a bad one turned up, "it will be known in whom the fault lies." These, among others, are the reasons why manufacturers use their own names for a drug. Usually the name selected is easy to remember, euphonious, and pronounceable. But this has not made everyone happy. An articulate minority claims that this leads to monopoly and to an exorbitant markup in price and prevents the consumer from shopping for the lowest price. The consumer is being told that if generic names were adopted, this problem would dissolve. Sounds easy, doesn't it? That is, if the consumer really understood and could remember the generic name. So what are the arguments for and against? This is how I see it.

I need hardly remind physicians that trade names usually are much more easily identified and remembered than generic but have the disadvantage that the same drug appears under a variety of trade names. Usually the physician sticks to the name he remembers and the company he trusts. Are trademarked drugs more reliable? In general yes, because the maker is identifiable. Generic name use tends to encourage the fly-by-night manufacturer who all too often sells drugs for legitimate use through the front door and to the rackets through the back. I would rather pay more for a trade-named amphetamine than a cheaper amphetamine tablet which may largely participate in the goofball market. And then there are drugs, such as digitalis, that I would not dare use without knowing who made them.

Trade-named drugs are usually more ex-

pensive. Markups vary in different drug stores. So they do with women's hats and men's pajamas. We would be naive not to realize this. But whether most of the public really wants to "shop" for drugs, I think is highly questionable. With the daily vitamin, probably yes, but for the once-in-a-lifetime drug, probably no. It is too often forgotten that drugs must compete in both effectiveness and price just as other things do in a free market. A manufacturer may have a monopoly for a year or so, but this is the invitation to others to produce a competing product. The originator must constantly discourage competition by progressively lowering the price, which is the way competition should work in favor of the consumer. Insulin is the perfect example of this principle in operation. While on the problem of cost, I would like to remind my colleagues of their need to be cost-conscious. Every physician should be aware of the relative costs and values of the drugs he prescribes. This information is easy to come by. Long experience has taught me that occasionally a drug is way out of line on price but within a few months and after a little discussion it falls back into line as far as the manufacturer's cost is concerned. But druggists' prices need to be watched as well. Hospitals often buy in such large volume that prices can be substantially lower. Since they are in a better position than the private practitioner to control the quality of the drug, bulk buying is much more practical and the need for trademarked drugs is less urgent.

Much is made of quality control for brand-named drugs. The question is, who will control the quality if only the generic name is used? The government? Not likely, in view of the many problems it already cannot solve. If the government had to exert quality control over all generically labeled drugs, this would be a fabulously expensive and time-consuming operation. Certainly neither the physician nor the consumer can do it. For some drugs, control is not very necessary, but there are too many for which it is

essential and there is no easy way to separate the two groups.

Then there are other aspects such as the fact that manufacturers of only generic-named products usually make only established drugs with large volume and guaranteed profit. There are many drugs of limited use, which a few ethical drug houses keep in stock at a loss. There are no usable generic names for prescribing drug mixtures. I think I have said enough to show you the need for brand names.

But where does the government stand on this issue? This is a question that nowadays always must be asked. In essence it says that you had better keep your house in order or else! There is no doubt that federal supervision is necessary and the FDA needs sensible support. Even in the best behaved pharmaceutical firms there have been temporary lapses which when detected and pounced upon by drug seizure have given the public the impression of an iniquitous, grasping enterprise preying on the sick carcass of mankind. But the fact is that the government felt it needed to take legal action only a very small number of times against the major firms, in contrast to hundreds of times against the many less well-known, usually generic name houses. In 1961 the House of Delegates of the AMA opposed legislation which would compel physicians to prescribe drugs or require them to be sold by generic name only. Do you want government to legislate universal excellence? If we passed laws to increase the power of FDA and every drug was guaranteed by the government, would this make you happy? After my personal experience with income tax, social security tax, and more recently trying to prove that I was born for the benefit of the Medicare boys, it doesn't make me feel happy!

And the costs? Wall Street calls the drug industry the fair-haired boys because after taxes it has had a 20% return on investment since 1957, as compared with 10% for all manufacturers. But half of this goes to stock-

(Next Page)

holders and the remaining 10% is spent for expansion, including new facilities for research. Furthermore, as many companies have found, there is nothing guaranteed about year-to-year profits. A competitor can cut your ear off before you realize what is happening. I know the nightmares of trying to keep ahead of smart competition. The Rhode Island Division of Public Assistance made a study which tells us a lot about cost of trade- versus generic-named drugs. They examined 10,000 drug prescriptions for welfare recipients to determine savings if the drugs were bought on a generic- or trade-name basis. Substituting generic-named drugs whenever possible would have saved less than 5%. I am sure in other circumstances more could have been saved, but not the 50% or more often claimed.

There are other arguments for and against, but this should be enough to make you think about the problem. On balance, under most circumstances I favor retention of trade names and when possible the inclusion of the generic name as a subtitle. This is a middle-of-the-road compromise, but let me point out that in a democracy this is about where we belong.

The pharmaceutical industry is currently

under a blistering attack from Washington and being threatened with criminal legal action. It is allegedly irresponsible and dishonest. In fact, I am almost afraid to admit knowing any of the people involved. But then I recall that Washington has had its irresponsible and dishonest inhabitants, some of whom even might be indicted if the wraps were taken off. This is not the point. The point is that it is time to stop the catcalling, decide on certain reasonable ways of conducting our medical operations, and then see that both industry and government abide by the rules. The generic name versus trade name has been and is one of those tiresome issues that never seems to get settled and is always good for a political "hoorah." As a physician, I have to prescribe drugs and my patients have to use and pay for them. Perhaps I have been too permissive, but I do not believe the cure is adoption of all generic names and federal control. I believe the problem is not all that complicated unless we prefer to make it so. Is it disrespectful to suggest that the decision should rest principally in the hands of the thoughtful physician? And you know there are some!

Irvine H. Page

Reprinted from *Modern Medicine*, June 6, 1966.

Cigarettes And Hearing Loss

The person who is troubled by noises in his ears (tinnitus aurium), ringing and buzzing sounds, may find these to be accentuated by cigarette smoking. In this case, he may be in danger of inducing a hearing loss. It is common knowledge that some individuals are sensitive to nicotine, and in these people it can be toxic or harmful to the hearing apparatus. Increase in the tinnitus could be a symptom which indicates that the individual is sensitive to nicotine and might be in danger of losing his hearing. (A. Glorig, M. D.: "Cigarettes and Tinnitus, *Jama Selected Questions and Answers*", 1965).

Regional Meeting Of Academy Of Psychosomatic Medicine

Seminar on Psychosomatic Aspects of Gastrointestinal Disease to be presented at the regional meeting of The Academy of Psychosomatic Medicine, Gainesville, Florida on March 17, 1967. This program is dedicated to the relation between depression and gastrointestinal disorders.

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Gainesville, Florida



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pyelonephritis?
pyelitis?
urethritis?
prostatitis?

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ions: Urinary tract infections caused by gram-negative and some gram-positive organisms.

ects: Mainly mild, transient gastrointestinal disturbances; in some instances, drowsiness, fatigue, pruritus, rash, urticaria, mild edema, reversible subjective visual disturbances (overbrightness of vision, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), and reversible photosensitivity reactions. Overdosage, coupled with certain predisposing factors, has produced convulsions in a few patients.

ions: As with all new drugs, blood and liver function tests are advisable during prolonged treatment. Pending further experience, like most therapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or impairment of kidney function. Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not arbitrarily be doubled unless under the supervision of a physician. Bacterial resistance may develop.

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References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on file. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: Antibiotic Agents and Chemotherapy - 1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

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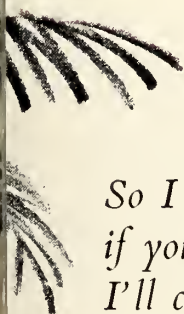
- "Excellent" or "good" response reported in more than 2 out of 3 patients with either chronic or acute gram-negative infections.¹

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: *E. coli*, *Klebsiella*, *Aerobacter*, *Proteus*, *Paracolon* or *Pseudomonas*... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

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College of Medicine, Univ. of Florida

The Department of Pediatrics, College of Medicine, University of Florida announces a Postgraduate Seminar entitled *Recent Advances In The Diagnosis And Treatment Of Metabolic And Nutritional Disorders In Children*. The seminar will be held from November 10th through November 12th, 1966 at the University of Florida College of Medicine, J. Hillis Miller Health Center, Gainesville, Florida.

Guests Speakers will include the following:

Albert Dorfman, M. D., Professor and Chairman, Department of Pediatrics, University of Chicago School of Medicine.

Gilbert B. Forbes, M. D., Professor of Pediatrics, University of Rochester School of Medicine.

Norman Kretchmer, M. D., Professor and Chairman, Department of Pediatrics, Stanford University School of Medicine.

Guy M. McKhann, M. D., Associate Professor, Department of Pediatrics and Medicine (Neurology), Stanford University School of Medicine.

Charles R. Scriver, M. D., Associate Professor, Pediatrics, McGill University School of Medicine.

Marvin D. Siperstein, M. D., Professor of Internal Medicine, Southwestern Medical School, The University of Texas.

Faculty members of the Department of Pediatrics and other faculty members of the College of Medicine will be participating in the seminar.

Registration fee of \$50.00 should accompany application to attend. For further information write to Dr. Charles V. Lowe, Department of Pediatrics or the Division of Postgraduate Education, College of Medicine, University of Florida, Gainesville, Florida.

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Meprobamate: Careful supervision of dose and amounts prescribed is advised; especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of pre-existing symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dose—operation of motor vehicles, machinery or other activity requiring alertness should be avoided. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia, the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor, and respiratory collapse.



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button popper**



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GIVE HOSPITAL-BASED PHYSICIANS SUPPORT THEY NEED

Jack W. Baker, M. D.

All of us are part of a Society within a society—the medical profession. As recent events have emphasized, we are a small minority group in the general mass of society. The recommendations of small minorities are not heeded unless they coincide with the political aims of the powers that be. Hence it follows that we should be reasonably cohesive in those areas where we must be effective.

Certain of our colleagues, (i.e. the hospital-based pathologists and radiologists), are in danger of being permanently relegated to the status of hospital employees in the Great Society. The obvious objective is control of the medical profession by control of the hospitals, as has been done in England and other countries. There is even an intent by the central powers to deprive these doctors of their status as consultants. Admittedly, many of these specialists are very content with their financial arrangements with their particular hospital and are unconcerned about present laws and trends of present bureaucracy.

The national, State, and local societies of these specialties have seriously considered the implications of present developments. As a minimum means of preserving their professional identity, these specialists have been urged to insist on separate billing of patients for professional services, as distinct from technical work and overhead costs. More ideally, radiologists, for example, should lease their departmental space from the hospital and own their equipment, thus securing their independence and freedom from economic subservience to the hospital.

These societies are acutely aware of the

present dilemma and of the need to get out from under the thumb of the hospital even though this may mean less security and in many cases actual financial sacrifices. Many of these specialists have never done any billing of patients in their entire lives; they are inexperienced in the problems of billing, secretarial expenses, and departmental overhead now eagerly assumed by the hospitals.

Support is needed now by all staff members of our hospitals to encourage pathologists and radiologists toward taking a determined stand. Unless they have the known support of the general staff, they will hesitate to take the initial step and succumb to the threat by hospital administrators to replace them with more compliant hirelings. If the hospital staff stands firmly behind the hospital-based specialists and *refuses* to accept on the staff a *substitute* proposed by the administration, the position of our pathologists and radiologists can be protected. They can continue to hold their heads high as our most valued consultants, rather than hospital technicians, and as respected leaders in our medical fraternity.

If we fail to support our brethren now, the ax will fall on us one by one as anesthesiologists, then surgeons, then obstetricians, and internists will be led to the guillotine of total hospital domination.

We must become involved. We are our brother's keeper. We must not wait to see for whom the bell tolls—*this bell tolls for thee*.

(Reprinted From the Bulletin of the Los Angeles County Medical Society).



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(see previous page)

THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

August, 1966

No. 2

William H. Sanders, M.D.

Early Leader In Medical Education And Public Health Work In Alabama

Ralph C. Williams, Sr., M. D.

Atlanta, Georgia

One of the outstanding leaders in medical education and early public health work in Alabama was Dr. William H. Sanders, a native of Tuscaloosa, Alabama, where he was born on July 9, 1838. He was the son of Dr. Charles Peake Sanders and Elizabeth Thompson Sanders, natives of Charleston, South Carolina. The forebears of both Dr. and Mrs. Charles P. Sanders emigrated to



William H. Sanders, M. D.

Dr. R. C. Williams, Sr. is a native of Alabama. B. S., Auburn University, 1907. M. D., University of Alabama, 1910. Three years of private practice in Alabama. American Board of Preventive Medicine. Three years as member of field staff of Alabama State Health Department. Thirty-three years as a career officer of the United States Public Health Service. Served as Assistant Surgeon General in charge of the Bureau of Medical Services for eight years, retired as Assistant Surgeon General in 1951. Author of "The United States Public Health Service 1798-1950," a volume of 800 pages, the first comprehensive history of the Service. Georgia Department of Public Health, 1951-1963. Director, Hospital and Health Planning for Community Council of the Atlanta Area, Inc., Atlanta, Georgia, since 1964.

South Carolina from England.

Dr. Charles P. Sanders moved from Charleston, South Carolina to Tuscaloosa, Alabama, where his three sons, Matthew Thompson, William Henry, and John Caldwell Calhoun were born. Later he moved to Clinton in Greene County, where he practiced medicine many years until his death in 1899. Four daughters were born after the family moved to Greene County, Fannie, Arabella, Martha Cornelia, Elizabeth and Clara Peake.

All of the sons, after a good elementary education, entered the University of Alabama at Tuscaloosa. William Henry Sanders entered the University of Alabama in 1856 and received the degree of Bachelor of Arts in 1858. As was then the custom in several Southern states, young men who wished to enter medicine sought their training in Philadelphia at the University of Pennsylvania, the oldest medical school in the United States or at Jefferson Medical College, founded there in 1825 under the sponsorship of Thomas Jefferson. Both of these institutions enjoyed high reputations throughout the South. It will be remembered that Crawford W. Long of Georgia, who first used ether as an anesthetic for a surgical operation was a graduate in medicine of the University of Pennsylvania. Also that J. Marion Sims, the surgeon who is the father of modern gynecology, a rural practitioner near Montgomery, Alabama, received his medical training at Jefferson Medical College in Philadelphia.

William H. Sanders, therefore, entered Jefferson Medical College after being awarded his Bachelor of Arts by the University of Alabama. He received his medical degree in 1861.

The oldest son, Matthew Thompson Sanders, entered the University of Alabama in 1857. He later served in the Confederate Army and was attached to Company C, 28th

Regiment, Tennessee Cavalry (Mead's cavalry).

The younger brother, John C. C. Sanders, entered the University of Alabama in 1858. He left the University during his senior year to enter the Confederate Army. He was assigned to drill a company at his home town of Clinton, Alabama. He later returned to the University and received the A. B. degree. After a few weeks he was elected captain of the company he had drilled at Clinton, Alabama. This company was known as Company B., 11th Alabama Infantry Regiment. His regiment was assigned to the Army of Northern Virginia, where they were in active campaigns and heavy fighting all during the war. He was severely wounded several times. He became Colonel of his regiment in 1862 and led his troops at Chancellorsville and Gettysburg. For gallantry in action he was made a Brigadier General in May, 1864 at the age of 24 years. During the fighting around Petersburg, Virginia, while leading his brigade, he was killed on August 21, 1864, by a Minie ball that severed both femoral arteries.¹ He was unmarried.

Dr. William H. Sanders, after receiving his medical degree in 1861 from Jefferson Medical College, returned to his home in Alabama. He enlisted as a Private in Company C., 11th Alabama Infantry on June 11, 1861. On July 19, 1861, he was appointed Assistant Surgeon of that regiment. Shortly thereafter, his regiment was assigned to the Army of Northern Virginia and participated in all of the major campaigns in Virginia, Maryland and Pennsylvania. Dr. Sanders was promoted to the grade of Surgeon on April 22, 1863.

Dr. Sanders was a regimental surgeon and attached to the brigade commanded by his younger brother in the fighting around Petersburg, Virginia, where his brother was killed there in battle.

With the surrender of the Army of Northern Virginia at Appomattox Court house,

WILLIAM H. SANDERS, M. D.

(Confederate)
S | 11 | Ala.
William H. Sanders
Priv., Co. C, 11 Reg't Alabama Infantry
Appears on
Company Muster Roll
of the organization named above,
for June 11 to 20, 1861.
Enlisted: June 11, 1861.
When: Greene Co., Ala.
Where: Capt. Sanders
By whom: During the war
Period: Last paid:
By whom:
To what time: 1861.
Present or absent: Present
Remarks:
Book mark:
J. M. Wright

1.

(CONFEDERATE)
S | 11 | Ala.
W. H. Sanders
Asst. Surg. 11 Reg't Ala. Inf. S. I.
Appears on a
Register
containing Rosters of Commissioned Officers, Pro-
visional Army Confederate States.
Date of appointment: July 19, 1861
Date of resignation, death,
transfer or promotion: 1861
Remarks:
Confed. Arch., Chap. 1, File No. 53, page 11
L. C. Thompson
(625) 202 Copyist

3.

(CONFEDERATE)
S | 11 | Ala.
W. H. Sanders
Asst. Surg. 11 Ala. Inf. S. I.
Appears on a Register of
Medical Director's Office,
Army of Northern Virginia,
containing copies of Letters sent.
Remarks: April 24, 1865
Passed for pardon of Surgeon
and orders April 22.
Confed. Arch., Chap. 6, File No. 611, page 127
G. M. Brou
(616) 202 Copyist

4.

(Confederate)
S | 11 | Ala.
William H. Sanders
Surgeon, 11 Regiment Alabama Infantry.
Appears on
Field and Staff Muster Roll
of the organization named above,
for Sept. 4 to Oct. 1, 1864.
Date of Commission, or
Regimental Appointment: G. M. B., 1863.
Station: Line of battle, and headquarters, etc.
Present or absent: Present
Remarks:
Book mark:
H. King
(613) Copyist

2.

1. Enlisted as Private, Company C, Eleventh Alabama Infantry
2. Showing duty station as Line of Battle, Petersburg, Virginia, 1863
3. Appointed as Assistant Surgeon, Eleventh Alabama Infantry
4. Promoted to rank of Surgeon
5. Paroled as a Prisoner of War, 1865

(Confederate)
S | 11 | Ala.
W. H. Sanders
Surgeon 11 Ala.
Name appears as a signature to a
Parole of Prisoners of War
belonging to the Army of Northern Virginia, and
this day surrendered by General Robert E. Lee,
U. S. A., commanding said Army, to Lieut. Genl.
U. S. Grant, commanding Armies of United
States.
Done at Appomattox Court House, Va., April 9,
1865.
Douglas
(613) Copyist

5.

Virginia, on April 9, 1865, Dr. Sanders was paroled as a prisoner of war and returned to his home in Clinton, Greene County, Alabama. Here, he practiced medicine until 1873, when he went to Europe to broaden his professional training. This period of general practice, in addition to his military experience, provided a firm foundation upon which to develop special training.

At this period of time, any physician in the United States who wished to acquire special medical training was compelled by public opinion within the medical profession as well

as the general public to spend some time in Europe.

There was another reason that Dr. Sanders wished to study in Europe. In the medical and scientific journals of that day, there was much being written about the work that Louis Pasteur, a French chemist, was doing in what is now called the science of bacteriology. Some diseases, it was being said, are caused by specific living organisms. Then there was also a German physician, Dr. Robert Koch, who was developing methods of studying and staining these bacteria or

organisms. The bacterial origin of anthrax had been definitely proven.

Also, there was an English surgeon in London, Dr. Joseph Lister, who was familiar with the work of Pasteur and Koch. Dr. Lister, after extensive experience, concluded that the formation of pus and the occurrence of gangrene seen in patients following surgery was due to air-borne bacteria. He developed methods of antiseptics and asepsis in connection with surgical procedures. He also introduced the practice of sterilization for sutures or surgical ligatures in surgical operations.

Dr. Sanders studied in Europe until 1877, a period of four years. During this time he worked in hospitals and laboratories in Berlin, Munich, Vienna, Strassburg, Paris and London.² A good deal of this time was devoted to studies in bacteriology; he was also getting training in surgery and the special field of diseases of the eye, ear, nose and throat.

Upon returning to the United States in 1877, he located in Mobile, Alabama, to begin practice in the specialty of diseases of the eye, ear, nose and throat. He became a member of the Mobile County Medical Society in 1878.

Shortly after locating to practice in Mobile, Alabama, Dr. Sanders was invited to become a lecturer on diseases of the eye at the Medical College of Alabama, which was then located in Mobile. It will be recalled that the Medical College of Alabama was established in Mobile in 1859 through the efforts of several physicians and public spirited citizens. One of the leaders in the establishment of the medical school was Dr. Josiah C. Nott, who was professor of surgery from 1859 to 1861. As early as 1847, Dr. Nott suggested that mosquitoes had some connection with the epidemics of yellow fever that ravaged the Southern states almost every summer.³ The first class was graduated in

1861. However, the medical college was closed during the War Between the States. Classes were again graduated beginning in 1868. This medical school became a part of the University of Alabama in 1897.

The records show that Dr. Sanders was a member of the faculty of the medical college in Mobile from 1878 until 1912, when he became Emeritus Professor of Ophthalmology, Otology and Laryngology. His teaching was by no means limited to the specialized fields of eye, ear, nose and throat. However, during the later years of his teaching, most of his classes in his special field were confined to instruction in diseases of the eye.

In 1884, he began teaching histology in addition to diseases of the eye and ear. From 1885 until 1893, he conducted classes in histology and microscopy, as well as diseases of the eye and ear. During 1893-1895 he was director of the laboratory of histology and bacteriology, professor of microscopy and director of the microscopical and bacteriological laboratories, also professor of diseases of the eye and ear.

From 1897 until 1912, Dr. Sanders was Professor of Ophthalmology, Otology and Laryngology. Not only did he cover the technical aspects of these specified medical subjects, but other subjects that medical students of that era needed to know about such as the details of how to fill out birth and death certificates and reports of epidemic and communicable diseases, and file with the proper authorities. He emphasized the importance of affiliating with the county medical society in the county where a physician is in practice. He also gave time to discussing matters of medical ethics, professional and public health matters of current interest. Dr. Sanders was elected and served as president of the Medical Association of the State of Alabama for the period 1890-1891.

The first State Health Officer of Alabama was Dr. Jerome Cochran. He was a native of

Tennessee and a graduate of the University of Nashville. Like most of the physicians of that time, he had been a medical officer in the Confederate Army. After the close of the Civil War, Dr. Cochran located in Mobile to practice medicine. When the Medical College of Alabama in Mobile reopened after being closed for seven years because of the Civil War, Dr. Cochran was chosen to be Professor of Chemistry. He soon became interested in the field of public health. Dr. Cochran was active in organizing the State Medical Association of Alabama.

Working with other leaders of the medical profession in the State, Dr. Jerome Cochran organized a state medical association that combined three important functions:

1. State Medical Association for physicians in practice in Alabama.
2. State Board of Medical Examiners to examine physicians for license to practice in the state.
3. State Board of Health to serve as the policy-making body for the State Health Department.

The Medical Association of the State of Alabama was organized in 1872. An Act of the State Legislature of Alabama, approved February 19, 1875, established the State Board of Health and placed health matters in the hands of the State Medical Association and the county medical societies at the state and local levels. This plan remained in effect for many years and was not materially modified until after World War I.

Dr. Jerome Cochran became the first State Health Officer in 1875 and continued in that position until his death on August 17, 1896. Dr. Sanders, who had been associated with Dr. Jerome Cochran, as member of the faculty of the medical college in Mobile, was selected as State Health Officer to succeed Dr. Cochran in 1897. Dr. Sanders had a very high regard for Dr. Cochran and often re-

ferred to him in terms of respect and admiration. The Jerome Cochran Lecture was an important event at the annual meeting of the State Medical Association of Alabama for many years.

Upon becoming State Health Officer, Dr. Sanders removed his residence from Mobile to Montgomery, Alabama. Because of his deep interest in the training of young physicians for his state, Dr. Sanders, after becoming State Health Officer, spent Thursday and Friday of each week during the months that classes were in session at the medical school in Mobile teaching third and fourth year students. He made the trip from Montgomery to Mobile each week to meet the classes from 1897 until 1912.

A few illustrations used in his classes by Dr. Sanders come to mind. In stressing the importance of a careful examination of a patient he related the instance of a Negro timber cutter who was referred to him by another physician because of a foreign body in the eye. It was a small piece of bark from a pine tree. The referring physician had not turned back the upper eyelid and examined it closely. This patient had suffered for several weeks because he was not carefully examined.

In this period, the coat-shirt or what is now called a man's shirt had not come into general use. A man's shirt in that era was not open all the way down the front as it is today. It had to be pulled on or off over the head. Dr. Sanders went to considerable pains to explain that male patients who might come under our care for the treatment of gonorrhea should be cautioned to be very careful not to get any of the gonorrheal discharge that might be on the tail of their shirt into their eyes in taking off their shirts. He had seen a case of gonorrheal infection of the eye that occurred in that manner.

He also advised against attempting to undertake surgery upon any members of our

own family. He had been persuaded by his mother to operate on her for cataract of the eye. Fortunately, the results were satisfactory, but he stated that the emotional involvement was too great. As medical students we stood in considerable awe of Dr. Sanders because he was chairman of the State Board of Medical Examiners for license to practice in the state.

It was my privilege to serve as a member of the field staff of the Alabama State Health Department from 1913 until 1916 in connection with a state-wide campaign for the eradication of hookworm disease. This program was made possible by funds granted by the Rockefeller Foundation. As a staff member of the State Health Department, I had contact with Dr. Sanders from time to time. He was a man of dignity, but a pleasant individual when one came to know him personally.

Dr. Sanders was very proud of the state of Alabama, its citizens, their accomplishments and progress. During a conversation with him while a member of his staff, I made reference to the heroic incident on November 13, 1793, at Randon's Landing on the Alabama River when Samuel Dale, a noted Indian fighter single-handedly killed seven Indian warriors with only slight injury to himself.⁴ This took place in what was later Greene County, Alabama. Samuel Dale lived in Alabama for a number of years and served for several terms in the Alabama legislature. The widow of Samuel Dale had been a patient under the care of Dr. Sanders and he was quite familiar with this and other exploits of Samuel Dale, famous Indian scout and early pioneer.

It was under his personal supervision that I learned the early lessons of public health administration. He insisted that literature for what we now term public health education be based on incidents and problems that arose and were solved in Alabama.

The U. S. Public Health Service had a very good pamphlet at that time on the cause and prevention of typhoid fever, but Dr. Sanders prepared and published a pamphlet on the cause and prevention of typhoid fever based on epidemics and experiences in Alabama.

It was about this time that there were stirrings in public health all over the nation. The campaign against hookworm disease had stimulated interest in full time local health officers in the southern states. One county in Alabama, Walker County, already had a full time health officer. Dr. Carl A. Grote, Sr., was the first full time local health officer in the state with headquarters at Jasper, Alabama.

Dr. Leslie L. Lumsden, a pioneer epidemiologist of the U. S. Public Health Service, was then actively visiting various state health departments advocating the establishment of full time county health departments. These early full time local health units consisted of a physician as health officer, a public health nurse, a sanitary inspector and a clerk-typist. Modern public health methods have naturally increased and changed the type of local health staffs. Dr. Lumsden, with a special Federal appropriation for rural sanitation studies, conducted a sanitary survey of Walker County to stimulate other counties to establish full time local health work. The survey consisted of sending a team of young physicians into the county to visit each residence and record the sanitary conditions as to (1) safe disposal of human waste, (2) water supply, (3) presence or absence of screens against flies and mosquitoes, and (4) general environmental conditions.

This sanitary survey of Walker County took four or five months to complete and was for the purpose of securing specific information as to the prevalence of communicable diseases and to show the presence of unsani-

tary conditions, open toilets, unsafe water supplies, lack of screens on dwellings and other deficiencies in health protection.

I was assigned by Dr. Sanders to go to Walker County and there work with five or six other physicians sent there by Dr. Lumsden from the U. S. Public Health Service.

This brought me in contact with that able epidemiologist and charming personality, Dr. Leslie L. Lumsden. He was one of the early leaders in the science of epidemiology in the United States. His enthusiasm and ardor for public health work were infectious. I soon determined that I wanted to make as my life's work, a career as a medical officer in the U. S. Public Health Service.

With the completion of the work in Walker County, I returned to Montgomery and advised Dr. Sanders that I expected to resign from his staff and go to Washington, D. C., to prepare for the examination for appointment in the career corps of the U. S. Public Health Service. Dr. Sanders offered no specific objections to my entering the Federal Service, however, he managed to convey the definite impression that he wondered what the world was coming to when a man who had been in his classes in medical school was leaving the state to enter the Federal Service. He never became completely reconciled to the fact that the Confederacy was defeated. Any man who had been in the Confederate Army, or his widow, could always be sure of service and assistance if they made their wants known to him.

As the second State Health Officer of Alabama, Dr. Sanders served in that capacity for 20 years, 1897-1917. This too, was a period of change. Yellow fever had scourged the states of the southern area since the colonial period. Smallpox was common in many states when he came into office. Typhoid fever and malaria also exacted a heavy toll. The yellow fever epidemics of 1876 and 1885 were especially severe throughout the state.

There were cases of yellow fever in Alabama in 1897. Yellow fever was present in

Mississippi and Louisiana in 1898, and in Florida, Louisiana, and Mississippi in 1899, also in Texas in 1903 and 1904. The last epidemic of yellow fever in the United States was in New Orleans in 1905.⁵ Progress was made in many phases of disease control in the 20 years that Dr. Sanders was State Health Officer. The advances of medical science and improved methods in public health work were important factors in better health conditions over the state.

He was a very fine, kindly, gentleman. The three years spent working under his direction were important, formative years. It was there that I began to learn of public health administration, the necessity for accuracy and precision in the planning and execution of health programs and in working with public health personnel. The first letter that I prepared for his signature contained three obvious errors. He pointed them out to me in a very pleasant manner. Thereafter, all material submitted by me for his signature or review was very carefully studied before presenting it to him.

He never married. When asked why he remained unmarried, Dr. Sanders usually replied in a humorous vein that he had been so busy that he had never found time to get married. His medical students were for many years his great interest; in a broad sense, they were his family. During his latter years, after moving to Montgomery from Mobile, his sister Clara (Mrs. Rufus K. Horton), a widow, managed his household affairs for him. About a year before his death, Dr. Sanders' health failed perceptibly. He felt that he could not properly carry out the duties of his office. He resigned as State Health Officer effective January 9, 1917. He died January 2, 1918, in Montgomery, Alabama, where he was buried.

Dr. Sanders was a member of the faculty of the medical school in Mobile from 1878 until 1912, a period of 34 years. A majority of the physicians in practice in the state for 50 years came under his influence while medi-

cal students. This was a period of great progress and change from empirical medicine to scientific medicine. He exemplified to all who came under his teaching the qualities of loyalty, integrity and pride in the profession of medicine that are so important to guide every physician throughout his entire life.

His work as a medical educator, his leadership in medical organization activities and public health were of incalculable value to the people of the state he loved and served so faithfully and well.

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TRAFFIC SAFETY: A REVIEW

In reporting a California study of traffic safety and chronic medical illness, the author concludes that current emphasis on epilepsy as the major medical obstacle to safe driving reflects too narrow an outlook. Equal concern should be given to other chronic ailments. In the study, drivers with epilepsy, cardiovascular disease, alcoholism, mental illness, and miscellaneous conditions averaged double the number of accidents of a group of drivers without known chronic diseases. The study left a number of open issues. As it was limited to drivers whose medical history was known to the California Department of Motor Vehicles, no conclusions could be drawn about the accident experience of people with similar conditions who have not been reported. Although loss of consciousness or conscious control is usually thought to be associated mainly with epilepsy, such episodes were found in 76 per cent of the group with diabetes, in 62 per cent of those with cardiovascular disease, in one-third of those with alcoholism and miscellaneous disorders, and in 25 per cent of those with mental illness. In three-fourths of the patients with epilepsy who were studied three years or more, there was medical improvement. This was true of few alcoholics. The study indicates that the primary medical condition per se is not the only human factor associated with an increased accident potential. Accident rates of drivers with medical conditions were further increased for drivers over the age of sixty, those with a poor attitude toward driving and maintaining proper medical regimen, those with more severe illness, and those with a past history of an accident or violation related to the medical condition. (J. A. Waller, M. D.: "Chronic medical conditions and traffic safety," *The New England Journal of Medicine*, 23 December 1965).

PATIENTS CAN HELP THEMSELVES TO BETTER HEALTH

Nineteen female patients suffering from arthritis and whose response to treatment was rated as *good* or *excellent* were compared with patients whose response to treatment was rated *fair* or *poor*. The patients with a better response to treatment showed greater adaptability. They maintained an interest in other people and in life tasks. Their image of and respect for themselves had not suffered greatly. On the other hand, patients who did not benefit from the treatment showed evidence of breakdown of ability to adapt, poorly controlled impulses, loss of self-esteem, and feelings of anxiety, guilt, and alienation. They seemed pathologically preoccupied with themselves and had lost involvement with the world about them. (G. F. Solomon, M. D., and R. H. Moos, Ph. D.: "Psychologic aspects of response to treatment in rheumatoid arthritis," *GP*, December 1965).

Clinical Study Of The Antihypertensive Effects Of Debrisoquin Sulfate* In Combination With Hydrochlorothiazide

F. Bernard Schultz, M. D.**

Auburn, Alabama

Pharmacological studies with a new antihypertensive agent debrisoquin sulfate (3, 4-dihydro-2 (1H)-isoquinoline carboxamide sulfate), have shown that the drug produces its hypotensive effects by postganglionic blockade without catecholamine depletion.¹ Preliminary clinical studies with this compound appear to confirm the pharmacological evidence.^{2, 3} Abrams and co-workers² reported that debrisoquin is apparently a potent antihypertensive with relatively prompt onset and short duration of action. The greater effect occurs when the patient is in the upright position. The drug appears to have a low toxicity potential in

addition to the desirable mode of action by postganglionic sympathetic blockade, without depleting catecholamine stores. Luria and Freis³ found that the antihypertensive effects of debrisoquin were considerably enhanced by the addition of hydrochlorothiazide. The present report summarizes the preliminary clinical experience with this compound given in combination with hydrochlorothiazide and compared with the diuretic alone, and with a placebo.

Method and Material

A total of 55 patients (26 males and 29 females) were included in the present study designed to compare the antihypertensive effects of placebo, hydrochlorothiazide and a combination of debrisoquin + hydrochlorothiazide. Patients ranged in age from 27 to 75 years although 39 of the patients were 50 years or older. Thirty-three were Negro and 22 were white. Diagnoses included benign essential hypertension in 51 patients, sub-malignant essential hypertension in one, renal hypertension in one, and both essential and renal hypertension in two. Duration of

*Declinax,[®] product of Hoffmann-LaRoche Inc., Nutley, New Jersey.

**Dr. Schultz is a graduate of Georgetown University School of Medicine and is a special lecturer in the School of Chemistry at Auburn University, Auburn, Alabama. He is Governor of The American College of Cardiology for the State of Alabama, member of the medical service, Lee County Hospital, Opelika, Alabama, and consultant in cardiovascular diseases at the Veteran's Administration Hospital, Tuskegee, Alabama.

CLINICAL STUDY OF ANTIHYPERTENSIVE EFFECTS

hypertension ranged from six months to ten years. Most patients had other disorders including arteriosclerotic heart disease, diabetes, obesity, heart failure, and duodenal ulcer. Six patients were hospitalized during part of the study period, one was hospitalized for the entire period, and 48 were treated on an outpatient basis.

Patients were divided into three groups according to the medication received. The study was single-blind in design; only the patients were unaware of which medication was being administered. The three test medications were supplied in identically appearing tablet form with each tablet containing either 12.5 mg. hydrochlorothiazide, a combination of 20 mg. debrisoquin + 12.5 mg. hydrochlorothiazide, or placebo. Patients who were taking antihypertensive drugs discontinued their medication for ten days prior to initiation of the study. Digitalis preparations and medication given for diabetes were continued as usual. Body weight was recorded and blood pressure was taken in both the supine and the standing position at each office visit.

Group I:

In Group I, there were 33 patients who received the three medications in the following order: placebo, 12.5 mg. hydrochlorothiazide, and 20 mg. debrisoquin + 12.5 mg. hydrochlorothiazide. Twenty-two patients had previously received antihypertensive therapy including digitalis. Prior to administration of the first test drug, the following laboratory tests were done: urinalysis, complete blood count, SGO-T and BUN. Patients were instructed to take one tablet of the first medication (placebo) daily after breakfast and return in one week. Duration of treatment was four weeks in all but two patients, one who received placebo for two weeks and one, for five weeks. Dosage was maintained at one tablet a day in all but three patients who doubled the dosage during the third treatment week. (Throughout the study period, dosage was adjusted when necessary according to response to treatment). Tablets of

12.5 mg. hydrochlorothiazide were substituted for placebo at the end of the first treatment period, and patients were instructed to take one tablet a day following breakfast. This dosage was maintained in all but one patient who received twice this amount after the first week of treatment. Duration of treatment with hydrochlorothiazide was four weeks in 31 patients, five weeks in one, and two weeks in one. Laboratory studies done prior to the study period were repeated after two or three weeks of treatment with hydrochlorothiazide. The third medication, a combination of debrisoquin and hydrochlorothiazide, was given for from five to ten weeks. Dosage was one tablet a day in 19 patients; three patients received one-half to one tablet a day, seven received from one to two tablets a day and four received from one to three tablets a day depending on the response to treatment. Laboratory studies were repeated again during this treatment period, usually during the fourth week.

Group II:

Group II consisted of 11 patients, six of whom had previously received antihypertensive therapy including digitalis. Placebo and a combination of debrisoquin 20 mg. + hydrochlorothiazide 12.5 mg. were administered. Placebo was administered first (one to two tablets daily) for periods ranging from one to three weeks. Dosage of the combined medication was one to two tablets daily in most patients although two patients received as many as four tablets a day. Three patients did not return for follow-up treatment with debrisoquin + hydrochlorothiazide. Duration of treatment with the combined medication ranged from two to 11 weeks. Laboratory studies performed in Group I patients were performed in two patients in Group II, before and twice during treatment with the combined medication.

Group III:

There were 11 patients in Group III who received only the combined medication, debrisoquin 20 mg. and hydrochlorothiazide

CLINICAL STUDY OF ANTIHYPERTENSIVE EFFECTS

BLOOD PRESSURE RANGES BEFORE AND AFTER TREATMENT WITH TEST MEDICATIONS

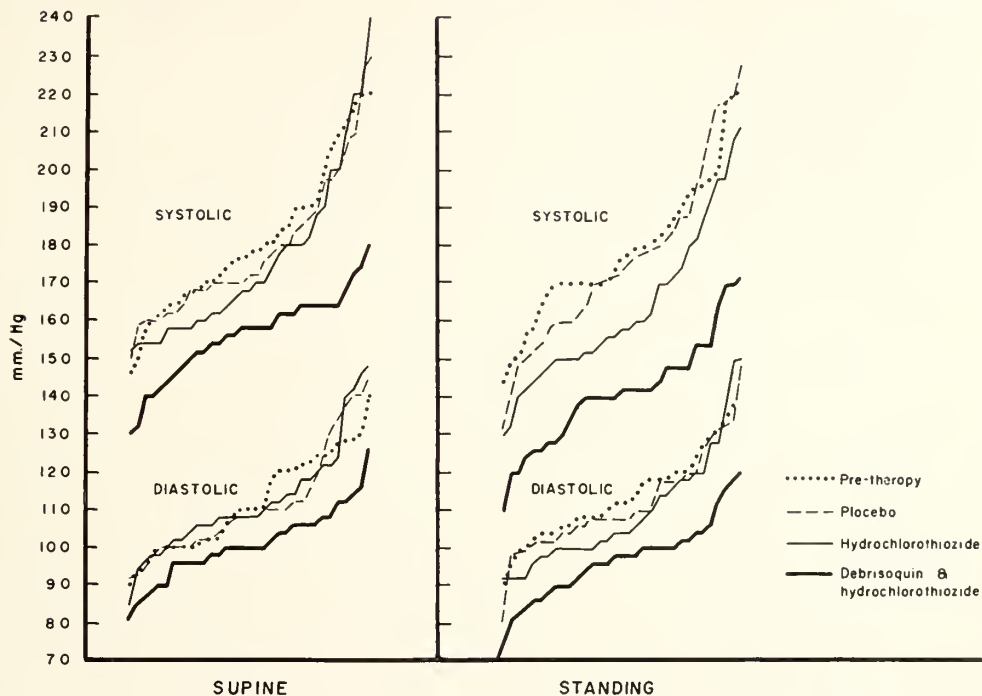


Figure 1

12.5 mg. Dosage ranged from $\frac{1}{2}$ to two tablets per day and duration of treatment varied from $7\frac{1}{2}$ to 14 weeks. Five patients in this group had received antihypertensive medication previously including digitalis. Laboratory studies (same as in Groups I and II) were performed before and during therapy in one patient with anemia due to a bleeding ulcer.

Evaluation of results was based on the extent to which blood pressure was reduced, patient acceptance of the medication and on the nature of side reactions. Accordingly, responses were classified as follows: excellent—15, very good—17, good—13, fair—7, poor—2, and one drop out not evaluated.

Results

Group I:

Blood pressure recordings before drug treatment and at the end of treatment with the three medications are shown in Table I. The ranges in blood pressure during each treatment period are presented graphically

in Fig. 1. From the data shown, debrisoquin in combination with hydrochlorothiazide appears to be a potent hypotensive agent. During treatment with placebo there was no significant change in either the systolic nor diastolic levels. Administration of hydrochlorothiazide alone lowered the blood pressure to a greater degree when patients were in the standing position than when in a supine position. The antihypertensive effects of hydrochlorothiazide were not as potent, however, as those exerted by the combination of debrisoquin and hydrochlorothiazide. After about one week following the administration of the second tablet, which contained hydrochlorothiazide, the increased urinary output fell off after about one week and the output remained fairly stationary. At the time when debrisoquin was added, with very few exceptions, not only was the blood pressure lowered, but there was also an increase once again in the urinary output. The average pre-therapy blood pressure in the supine position for patients in Group I

CLINICAL STUDY OF ANTIHYPERTENSIVE EFFECTS

Table I

PRE- AND POST-THERAPY BLOOD PRESSURE READINGS OF PATIENTS IN GROUP I

Pt.	Age	Sex	Initial Supine	B. P. Standing	B. P. Following Placebo		B. P. Following 12.5 mg. hydrochlorothiazide		B. P. Following 20 mg. Debrisoquin + 12½ mg. hydrochlorothiazide	
					Supine	Standing	Supine	Standing	Supine	Standing
1	70	F	168/106	170/108	170/108	174/102	180/108	172/102	152/100	142/98
*2	44	M	164/98	170/110	168/108	176/118	160/114	158/120	164/116	154/116
4	57	M	176/120	182/120	172/110	172/118	164/108	156/114	162/106	148/100
*5	62	M	160/120	150/120	188/144	182/120	160/124	150/120	142/106	134/98
*6	72	F	150/100	178/120	190/98	178/102	174/100	160/104	144/90	130/92
*7	65	F	212/130	198/134	226/140	214/126	200/122	180/116	164/108	170/120
8	32	M	170/110	180/130	172/100	164/108	166/122	158/118	150/100	140/96
*9	49	F	168/102	170/100	162/100	154/104	152/84	150/98	162/96	140/100
10	27	M	178/108	164/118	160/102	148/100	188/112	154/100	168/104	148/100
*11	61	F	220/128	200/108	150/100	178/110	190/118	198/100	164/102	148/84
*12	39	M	190/128	170/124	198/138	218/132	220/140	192/128	172/112	170/104
*13	67	F	184/124	196/118	164/92	160/106	158/98	130/92	162/98	142/102
14	66	F	178/100	194/112	170/92	184/108	168/96	170/104	158/88	148/90
15	52	F	176/102	170/112	168/108	170/108	162/106	152/102	130/84	126/86
*16	43	F	162/100	168/106	160/100	150/106	154/102	150/100	164/108	142/104
17	65	F	190/94	180/102	186/94	194/102	154/108	144/100	158/80	120/70
18	55	F	164/90	170/100	180/106	172/118	200/114	188/128	158/96	142/98
19	47	F	190/124	174/118	162/112	170/110	162/112	170/110	146/98	140/100
*20	58	M	146/102	158/108	208/126	218/118	178/102	152/98	164/100	142/86
*21	66	F	180/100	184/104	198/100	220/108	182/94	174/100	156/90	144/96
*22	49	F	174/110	150/96	178/108	162/108	168/118	156/108	156/100	154/112
*23	66	F	158/100	144/90	168/102	132/80	170/108	148/96	132/86	110/80
*24	39	M	190/118	190/108	180/112	180/120	180/106	182/114	158/96	128/90
*25	61	M	172/94	170/104	170/102	140/98	158/108	140/106	158/100	140/90
*27	57	M	218/140	218/138	230/134	228/148	240/148	212/150	174/126	164/118
*28	38	F	200/122	196/132	184/118	180/130	170/120	162/118	140/100	126/94
*29	41	F	220/128	220/114	200/132	188/134	220/142	208/138	180/112	172/100
30	66	F	170/110	170/118	170/104	160/100	158/106	132/92	164/96	120/88
*31	52	M	180/110	---	158/110	152/102	154/110	146/92	148/106	128/98
32	66	F	206/124	188/128	160/114	204/110	180/104	160/100	152/104	140/106
*34	62	F	184/122	180/112	176/110	160/104	154/108	142/92	154/106	138/102
*35	35	M	210/120	178/106	210/140	188/132	210/146	198/150	140/114	124/82
*37	62	M	166/100	157/104	170/110	158/108	158/98	150/104	154/96	154/96
Averages			181/112	178/113	179/111	177/112	176/112	163/109	156/101	141/97

*Patient received antihypertensive treatment prior to study.

was 181/112 and for the standing position, 178/113. These averages were reduced to 176/112 for the supine position and 163/109 for standing following therapy with hydrochlorothiazide alone. Following treatment with the combined medication, these averages were further reduced—156/101 for the supine position and 141/97 for standing (Table I).

Treatment with the combined medication in this group was rated as follows: excellent in 14 patients, very good in 11, good in six, fair in one and ineffective in one. In the 22

patients who had received antihypertensive drugs previously, the effect of combined debrisoquin and hydrochlorothiazide was compared with that of previous treatment: in 12, the combined treatment was considered better than previous treatment, and in ten patients, it was considered equal.

Side effects occurred in nine patients in Group I taking debrisoquin + hydrochlorothiazide. These included dizziness in nine, weakness in one, and headache in one. These effects were generally mild and transient and in no patient necessitated the discontinuation

Table II

SUMMARY OF RESULTS OF STATISTICAL ANALYSIS IN 32 PATIENTS

		TREATMENT		PERIOD		
		Pre-medication	Placebo	Hydrochlorothiazide	Hydrochlorothiazide + debrisoquin	
				After 4 weeks	After 7 weeks	
SUPINE MAP*	Average MAP in 32 pts.	134.8	134.1	133.6	121.0	119.1
	Difference		0.7	0.5	12.6	14.5
	P value		n. s.**	n. s.	< .01	< .01
STANDING MAP	Average MAP in 32 pts.	134.7	134.0	128.0	114.0	112.6
	Difference		0.7	6.0	14.0	15.4
	P value		n. s.	< .01	< .01	< .01

*MAP = Mean arterial pressure

**n. s. = not significant

of treatment. All males in the study were carefully questioned regarding impotence, a reported side effect of debrisoquin.³ There were no reports of this side effect, even in patients receiving high dosages. Diarrhea was not reported as a side effect. An insignificant complaint from several patients was that the tablets containing both debrisoquin and hydrochlorothiazide tasted bitter. Laboratory studies which were done prior to and during treatment with both active drugs by the same methods and by the same technician revealed no abnormalities related to drug administration.

Statistical analysis was done on 32 patients in Group I. The usable sample size was 32, since pre-treatment readings were not taken in one patient in the standing position. Final blood pressure readings at the end of the four-week treatment period for placebo and hydrochlorothiazide were used in the analysis. Blood pressure recordings after four weeks of treatment and the final readings after seven weeks of treatment with the combined medication were both used in the analysis. Mean arterial blood pressure ($2/3$

diastolic blood pressure + $1/3$ systolic blood pressure) were calculated for each patient and the paired t-test was used to determine significance. Table II summarizes the results of the statistical analysis and shows that the differences between mean arterial pressure (readings taken in the supine position) after hydrochlorothiazide and the combined medication were significant. When blood pressure was recorded in the standing position, the differences between mean arterial pressure for placebo and hydrochlorothiazide were significant as were the differences between mean arterial pressure for hydrochlorothiazide and the combined medication after four and seven weeks.

Group II:

Of the 11 patients in this group response to administration of debrisoquin + hydrochlorothiazide was rated as excellent in four patients, very good in one, ineffective in one, and there was no follow-up in two patients. Pre- and post-therapy blood pressure recordings are summarized in Table III. In five patients, effects of treatment with the combined medication were compared with ef-

Table III

SUMMARY OF RESULTS OF TREATMENT (GROUP II)

Pre-Therapy		After Treatment With Placebo		After Treatment With Debrisoquin + Hydro- chlorothiazide	
Supine	Standing	Supine	Standing	Supine	Standing
204/110	220/118	234/140	240/136	168/104	160/103
200/98	210/98	214/106	214/108	150/82	118/70
190/154	210/150	280/160	232/148	168/130	152/120
-----	164/100	-----	168/118	-----	170/130
-----	240/140	174/110	170/100	160/108	158/102
-----	184/122	-----	180/120	-----	144/104

(Five patients were inconsistent in returning for follow-up visits).

SUMMARY OF RESULTS OF TREATMENT (GROUP III)

Pre-Therapy		After Treatment With Debrisoquin + Hydrochlorothiazide	
Supine	Standing	Supine	Standing
190/120	168/110	152/102	140/98
220/110	140/90	130/84	190/100
230/140	220/134	164/108	160/110
230/138	210/140	160/96	164/100
200/120	190/108	160/100	164/104
160/100	148/80	186/100	142/84
174/112	190/120	164/98	146/100
210/102	-----	196/124	176/108
-----	164/110	Blood pressure recordings insufficient for tabulation.	

(B. P. cuff not long enough to be wound around arm in 1 pt.)

(1 pt.—Inconsistent in returning for follow-up visits.)

fects of previous medication; and three patients the combined medication was rated as better, and in two patients the rating was equal.

Side effects occurred in five patients in Group II and included dizziness in three, headache in two, weakness in one, nose-bleed in one, ringing in ears in one, fainting spell in one and one patient reported that he "felt bad." One of these five patients had a rather stormy course of treatment. Prior to therapy, her blood pressure was 204/110 in the supine position and 220/118 in the standing position. Initially, she received placebo for two weeks but due to her severe hypertension debrisoquin and hydrochlorothiazide was substituted for the placebo at a dosage of one tablet a day which was continued for three weeks without significant reduction in blood pressure. Administration of two

tablets daily for two weeks resulted in a slight fall in blood pressure and when increased to three tablets a day for two weeks there was no further significant change. A good response was obtained with four tablets a day which was given for three weeks until one evening when the patient fainted complaining later of substernal pain for which she was immediately hospitalized. Extremely erratic fluctuation of blood pressure was noted during the first six hours of hospitalization; although the patient presented the common signs and symptoms of shock, these were not of the degree seen in overt shock. All medication was discontinued and the patient was placed in oxygen. An electrocardiogram revealed a left ventricular strain pattern with ischemia, and laboratory findings (SGO-T) were suggestive of infarction. Blood pressure had leveled off to 145/80 dur-

ing the first hospital day but began to rise during the first week. Debrisoquin + hydrochlorothiazide was prescribed at a dosage of one tablet a day which was subsequently raised to two tablets a day. The patient was discharged on the 14th hospital day feeling well and able to walk about. Response in this patient was good.

Laboratory studies performed in two patients revealed no abnormalities attributable to the administration of debrisoquin or hydrochlorothiazide.

Group III:

In this group of 11 patients, response to treatment with combined debrisoquin + hydrochlorothiazide was rated as excellent in four, very good in four, good in one, fair in one, and in one patient there was no follow-up. Pre- and post-therapy blood pressure readings for patients in this group are presented in Table III. Of the five patients who had received antihypertensive therapy previously, response with debrisoquin and hydrochlorothiazide was rated better than with previous medication in two patients, equal in two, and in one, there was no follow-up. Laboratory studies performed in one patient indicated no drug-related abnormalities. One patient in this group was so obese that facilities for weighing him were not available. His estimated weight was 600 pounds and his arm was of such size that the blood pressure cuff was too small to obtain a reliable blood pressure reading. During the study period, there was some weight lost as determined by the size of his belt.

Discussion

It appears from the above data that debrisoquin sulfate in combination with hydrochlorothiazide is a potent and safe form of antihypertensive therapy. The hypotensive response with administration of hydrochlorothiazide alone was considerably enhanced when debrisoquin was administered in combination with the diuretic. Judging from the responses seen in this study which included patients with mild, moderate, and severe

hypertension, it appears that the drug combination is useful in the majority of cases of hypertension regardless of the severity of the disease. Effects of orthostatic hypotension such as vertigo, dizziness, weakness and/or syncope on standing were observed in some patients, although in most, these were of a mild and transient nature. It is essential that patients receiving these drugs be carefully instructed regarding the possible development of side reactions and that clinical progress be followed closely.

Summary

The antihypertensive effects of hydrochlorothiazide 12.5 mg., placebo, and a combination of debrisoquin 20 mg. + hydrochlorothiazide 12.5 mg. were compared in a group of 55 hypertensive patients, 26 males and 29 females ranging in age from 27 to 75 years.

From the data obtained, debrisoquin in combination with hydrochlorothiazide appears to provide potent hypotensive effects in patients with mild to severe hypertension. Side effects were generally mild and of a transient nature. No laboratory abnormalities attributable to administration of the test compounds were noted.

It is concluded that the administration of debrisoquin in combination with hydrochlorothiazide offers a potent and safe means of antihypertensive therapy. The importance of maintaining a close watch on the progress of patients receiving the combined medication is stressed.

References

1. Moe, R. A., Bates, H. M., Palkoski, Z. M. and Banziger, R.: Cardiovascular effects of 3, 4-dihydro-2 (1H) isoquinoline carboxamidine (Declinax), *Curr Ther Res* 6: 299, Apr 1964.
2. Abrams, W. B., Pocelinko, R., Klausner, M., Hanauer, L. and Whitman, E. N.: Clinical pharmacological studies with debrisoquin sulfate, a new antihypertensive agent, *J New Drugs* 4: 268, Sept-Oct 1964.
3. Luria, M. H. and Freis, E. D.: Treatment of hypertension with debrisoquin sulfate (Declinax), *Curr Ther Res* 7: 289, May 1965.

In Diverticulitis...

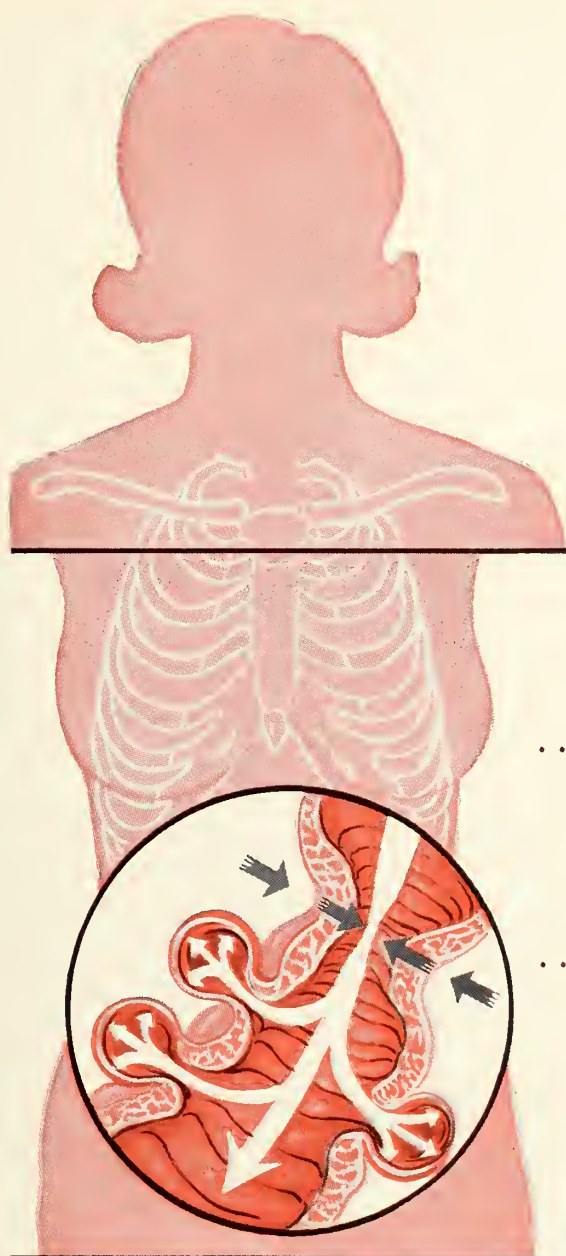
**Increased pressure
from straining
aggravates
diverticulitis**

METAMUCIL[®]

brand of psyllium hydrophilic mucilloid

Metamucil Powder: 4, 8 and 16-ounce
containers.

Instant Mix Metamucil: cartons of 16
and 30 single-dose packets



Metamucil

- ... to counteract the constipation which is etiologically important and
- ... to protect the mucosal surface against physical irritants.

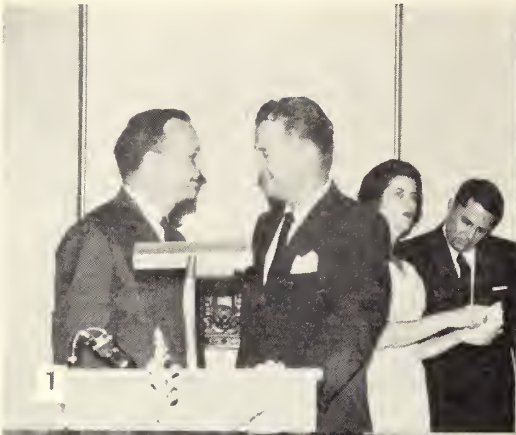
Average Adult Dosage:

One rounded teaspoonful of Metamucil (or one packet of Instant Mix Metamucil) in a glass of cool liquid one to three times daily.

SEARLE

Research in the Service of Medicine

Picture Highlights of 1966 Ann



1. Dr. George Rudd, Republican candidate for the Jefferson County Board of Education, confers with Republican Gubernatorial candidate Jim Martin; 2. Dr. J. R. Heller, speaker, from Bethesda, Maryland; 3. Dr. Abe Mickel and Dr. James Mule', speakers from Louisiana State University Medical Center, New Orleans, Louisiana; 4. Dr. Philip Thorek and Dr. Manuel Lichtenstein, both from Chicago, pose just prior to their departure from the meeting; 5. Mr. W. V. Wallace, executive secretary, MASA, and Mr. Whalen Strobhar, AMA representative, enjoy the patio at the Parliament House; 6. Dr. W. H. Y. Smith and newly appointed treasurer, Dr. Winston A. Edwards, discuss communicable diseases; 7. & 8. Ladies luncheon at The Club.

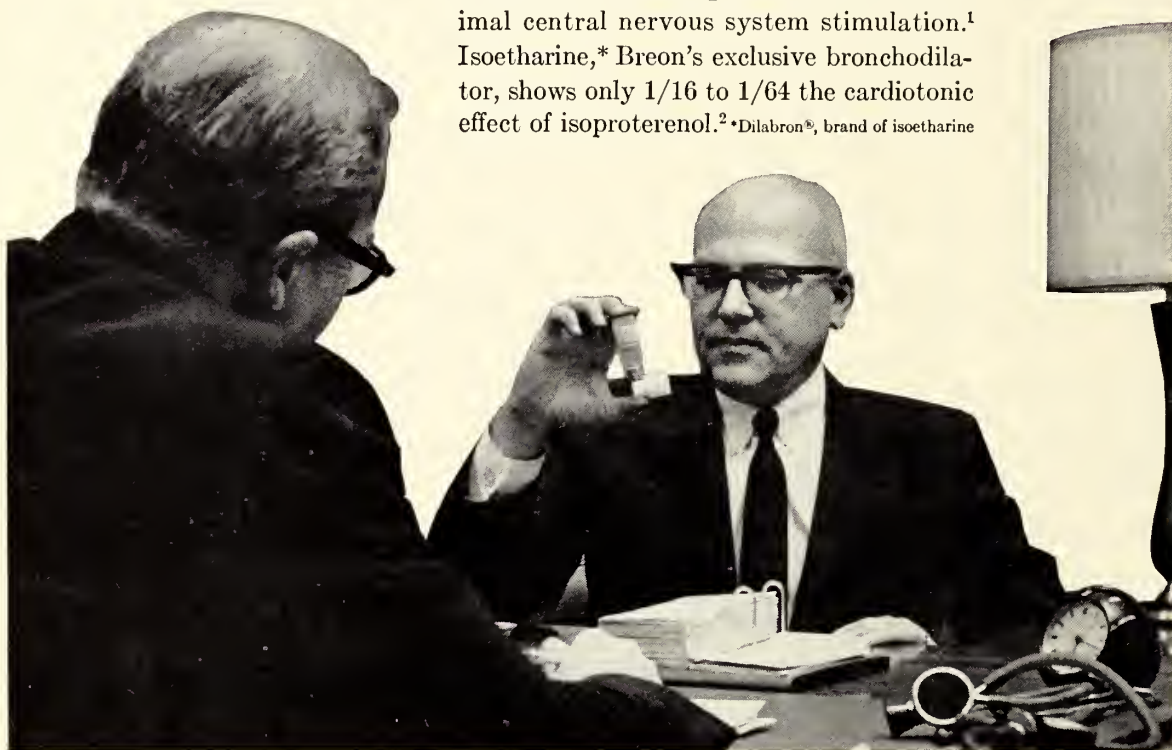
eting, Alabama Chapter, AAGP



1. Dr. H. C. Mullins, immediate past president, congratulating new president, Dr. John B. Rice, Jr.; 2. Dr. Amos Johnson (left), president, AAGP, congratulates president-elect, Dr. Grover C. Murchison, Jr.; 3. Dr. Jerre White, newly elected vice-president, chatting with Dr. John Foster, a past president; 4. Dr. T. Riley Lumpkin giving Public Relations Committee Report; 5. Dr. George Wilson, general chairman of the annual meeting; 6. Dr. W. C. Browne giving Mental Health Committee Report; 7. Dr. R. O. Rutland, Jr., presenting report of the Education Committee.

"I like Bronkometer... I breathe better... don't get the jitters."

Patients feel relaxed with Bronkometer. Its bronchodilator-decongestant action has minimal central nervous system stimulation.¹ Isoetharine,* Breon's exclusive bronchodilator, shows only 1/16 to 1/64 the cardiotoxic effect of isoproterenol.² *Dilabron®, brand of isoetharine



BRONKOMETER® ASTHMA, CHRONIC BRONCHITIS, EMPHYSEMA

isoetharine 0.6%; phenylephrine 0.125%; thenyldiamine 0.05%—Superior because it contains isoetharine

COMPOSITION: Bronkometer delivers at the mouthpiece 200 metered doses of: 350 mcg isoetharine methanesulfonate (0.6%); 70 mcg phenylephrine HCl (0.125%); and 30 mcg thenyldiamine HCl (0.05%) with saccharin, menthol and fluorochlorohydrocarbons as inert propellants. Preserved with ascorbic acid 0.1% and alcohol 30%.

RECOMMENDED DOSAGE: One or two inhalations with at least one minute between inhalations. Occasionally more may be required, however in most cases, inhalations need not be repeated more than every four hours. Dosage should be adjusted to the severity of the condition and to patient's response.

PRECAUTIONS: Bronkometer is unusually free from cardiovascular and other side effects, but the usual precautions associated with sympathomimetic amines should be observed. Bronkometer should not be administered simultaneously with epinephrine or similar compounds because of the possibility of tachycardia, although it may be alternated with these agents. Dosage must be carefully adjusted in patients with hyperthyroidism, hypertension, acute coronary disease, cardiac asthma, limited cardiac reserve and in individuals sensitive to sympathomimetic amines.

SUPPLIED: 10 ml pressurized aerosol vials complete with measured dose valve and oral nebulizer.

References: 1. Spielman, A. D.: *Curr. Therap. Res.* 3:235 (June) 1961. 2. Herschfus, J. A.; Bresnick, E.; Levinson, L.; and Segal, M. S.: *Ann. Allergy* 9:769 (Nov.-Dec.) 1951.



BREON LABORATORIES INC. 90 Park Avenue, New York, N.Y. 10016

TALLADEGAN IS DEAN OF DARTMOUTH MEDICAL SCHOOL

Dr. Carleton B. Chapman of Dallas has been appointed dean of the Dartmouth Medical School, President John Sloan Dickey of Dartmouth announced today.

Dr. Chapman is currently professor of medicine at the University of Texas Southwestern Medical School in Dallas and director of the Pauline and Adolph Weinberger Laboratory for Cardiovascular Research. He is a diplomate of the American Board of Internal Medicine and of its Cardiovascular Subspecialty Board. He is also a fellow of the American College of Physicians and is a member of the Association of American Physicians, the American Society for Clinical Investigation, the American Physiological Society, and other professional groups.

A native of Talladega, Ala., Dr. Chapman was educated at Davidson College and was a Rhodes Scholar at St. Johns College, Oxford. He received his doctorate of medicine in 1941 and a master's degree in public health in 1944, both from Harvard. During the war, Dr. Chapman served as a commissioned officer in the United States Public Health Service in the Middle and Far East. In 1947, he took up a teaching and research appointment at the University of Minnesota Medical

School and accepted the Dallas appointment in 1953. He was awarded a Career Professorship by the National Institutes of Health in 1963.

Dr. Chapman's research and clinical interests have been largely in the fields of the heart and circulation, with a special emphasis on human exercise. He has also evidenced continuing concern over problems of medical education and research, and served as president of the American Heart Association in 1964-65. He has published many articles and monographs on heart disease, physiology, various aspects of medical education, and in the field of the history of medicine and science.

Dr. Chapman is married to the former Ruth Horine. They have three children, Nancy C. (Mrs. Jack A. Collins), John G., and Mary A., and one grandchild.

Until Dr. Chapman's arrival in the late fall, Dr. S. Marsh Tenney will continue as acting dean of the Medical School. Dr. Tenney, who was director of medical sciences and dean from 1957 to 1962, will return to his duties as chairman and professor of physiology on Dr. Chapman's arrival.

CANCER STILL A WORLD PROBLEM

Six hundred people die of cancer every day in the United States. It is estimated that one out of every four persons now living will develop cancer at some time unless new preventive measures are found. Cancer usually begins as a tiny tumor at a specific location. At this stage, it often can be cured with proper medical treatment. Otherwise it spreads rapidly and the cancer grows and invades or infiltrates surrounding normal tissues. It may even grow through walls of blood vessels and then bits of the tumor break off and are carried to distant parts of the body. Other detached cancer cells may enter the lymph channels and be carried to the heart and thus get into the circulating blood. The wandering cancer cells then find a new location where they multiply and start new cancers. Cancer may be caused by friction, contact with certain chemicals, overexposure of tissues to high temperature, prolonged exposure to sunlight or x-rays, radium, or other radioactive substances. Although cancer is not inheritable, there may be an inherited tendency toward developing cancer. Since early diagnosis and treatment are essential to the cure of cancer, regular medical examinations are the best protection against the disease. (Pennsylvania Medical Society, *Your Health*, 9 February 1966).

Physicians Laud Alabamian

Alabama-born Dr. Henry Homer Allen, II, has been named "general practitioner of the year" by the Medical Association of Georgia.

Dr. Allen, the son of a "horse and buggy doctor" in the Oswichee community of Russell County, was presented with the award during Tuesday's final general session of the MAG's 112th annual convention in the municipal auditorium in Columbus.

The Decatur, Ga., physician's father died when he was two years old leaving a wife and three children.

Dr. Allen interrupted his high school education in Columbus to take a job on a construction project at Bibb Mills to aid in supporting his mother and two sisters.

THE DOCTOR SUBSEQUENTLY completed his secondary education and went on to Mercer University and Emory graduating from the university's medical school in 1922.

After interning in St. Luke's Hospital, Bethlehem, Pa., Dr. Allen settled in Decatur, where he has practiced medicine for almost 40 years.

A colleague described Dr. Allen as one who "has not lived dramatically, nor sought any particular place in the sun."

The doctor was described by his associates as a man loved and respected and admired for his spiritual stamina which has been evidenced during times of trial and discouragement in his life as well as in the lives of others.

Emotional Health Hazard

NOISE IN THE HOME, penetrating from the outside or transmitted through thin inside walls, is becoming a serious emotional health hazard. Noise deteriorates emotional balance, Dr. Lee E. Farr recently told the National Association of Home Builders. The result "may be evident in an increase in gastrointestinal symptoms, an altered response to a common allergen, development of migraine attacks, or other manifestations of psychic stress . . ."—*Med. World News*, Jan. 28, 1966, p. 7.

A Future In Anesthesiology

A career in anesthesiology offers the physician a highly satisfactory life of service, of interest, and of spiritual and material rewards. The anesthesiologist assumes grave responsibilities. He uses powerful drugs and carries their action closer to the point of irreversibility than does any other practitioner of medicine. He is able to use these potent substances properly, maintain the patient during surgery, help him awaken with least possible discomfort, protecting him against postoperative upsets. Eligibility for certification by the American Board of Anesthesiology, Inc., requires that a Doctor of Medicine have two years of practice, or three years of approved training and one year of practice. Both a written and oral exam are given prior to certification. The training period is constructed to help the anesthesiologist proceed toward competence through a series of graduated steps by which time he is ready to assume the responsibilities of his specialty. This field offers also opportunities for teaching and research. (R. D. Dripps, M. D., and A. Lamont, M. D.: "Your future in anesthesiology," *The New Physician*, January 1966).

Rx Generic—False Economy

Regardless of the criticisms that fall our lot, it is the physician's responsibility to prescribe those medications which will most effectively aid in the recovery of the patient. This responsibility cannot be delegated to any politician, government official, or pharmacist. If he can minimize the injury to the patient's pocketbook, this is desirable. However, it is false economy to prescribe a drug under its generic name if there is reasonable doubt about the clinical acceptability and effectiveness of the brand that will then be dispensed by the pharmacist. —William M. Straight, M. D., in *Bulletin of Dade County (Fla.) Medical Association*, (36:21-22), April 4, 1966.

rankly, most antihyper-
ensives are pretty good if
ou give an adequate dose.
m looking for one with a
mple regimen so that mix-
ps in doses and therefore
e chance of side effects
re minimized.

Regroton®

Orthothalidone 50 mg, reserpine 0.25 mg.

Tablet daily
Lowers blood pressure

Advantage: Both components of Regroton
long-acting.

Usual dosage: One tablet daily with
breakfast.

Contraindications: History of mental
depression, hypersensitivity, and most
cases of severe renal or hepatic diseases.

Precautions: Discontinue 2 weeks before
general anesthesia, 1 week before electro-
cardiogram therapy, and if depression or
peptic ulcer occurs. With administration
of enteric-coated potassium supplements,
possibility of small bowel lesions
should be kept in mind.

Warnings: Reduce dosage of con-
comitant antihypertensive agents by one-
half. Discontinue if the BUN rises or
renal dysfunction is aggravated. Electro-
lyte imbalance and potassium depletion
may occur; take particular care in
patients with heart disease,
hypertension or severe ischemic heart disease,
or in patients receiving corticosteroids,
digitalis, or digitalis. Salt restriction is not
recommended. Use with caution in
patients with ulcerative colitis, gall-
stones, or bronchial asthma.

Side effects: Nausea, vomiting, diarrhea,
muscle cramps, headaches and dizziness.
Potential side effects include angina pecto-
ris, anxiety, depression, drowsiness,
hyperglycemia, hyperuricemia, lassitude,
leukopenia, nasal stuffiness, nightmare,
pruritus, urticaria, and weakness.
For full details, see the complete prescrib-
ing information.

Availability: Bottles of 100 and 1000 tablets.

Regroton





FOR A CLEAN START IN VAGINITIS THERAPY

superior cleansing action ■ STOMASEPTINE's oxidizing and mucolytic properties promote thorough cleansing of the vaginal vault. Dissolves and removes irritating secretions more effectively than vinegar which tends to coagulate glycoproteins. Low surface tension and release of nascent oxygen contribute to deep penetration and cleansing of rugae.

enhances specific therapy ■ Removal of vaginal debris with STOMASEPTINE enhances the effectiveness of specific therapy...ensures maximum contact of topical medication with vaginal mucosa.

excellent patient acceptance ■ Anti-pruritic and deodorizing...pleasantly scented...patients feel "fresh and clean."

Contains: sodium perborate, sodium bicarbonate, sodium chloride, sodium borate, menthol, thymol, eucalyptol, methyl salicylate and aromatics—6 oz. and 15 oz. jars; cartons of 12 10-gm. packets

Literature and professional supply on request.

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STOMASEPTINE®
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Alabama Department of Public Health



PACKAGED DISASTER HOSPITALS

In the event of a thermonuclear attack upon the United States, a major portion of existing hospital facilities may be destroyed. In the event of a major disaster in any area, existing hospital facilities usually prove to be inadequate. In such cases Packaged Disaster Hospitals are available and have been used to expand existing hospital facilities or function as an independent unit.

Packaged Disaster Hospital units are assigned to states in accordance with formal federal-state agreements. They are federal property loaned to states for emergency community use. Upon declaration of a national emergency, the official custodian for this program in the state or his official representative may activate a unit.

In Alabama the state health officer may authorize such action. If communication is impossible, the local governing body of a community may activate a unit. Use of the PDH in a major natural disaster must be approved through both federal and state authorization.

In this state the Packaged Disaster Hospital Program is administered by the Alabama Department of Public Health. Application for acquiring and storing a PDH is made through this agency subject to federal approval. Units are assigned to a specific community on the basis of location of storage site, adequate storage facilities, availability



Laboratory Section

of responsible custodianship, and existence of plans for emergency utilization, including staffing.

Units are usually administered locally by a chief of staff, preferably a physician with hospital executive experience. Aided by a volunteer staff, he is responsible for pre-planning, including a written community emergency plan. The chief of staff and other leaders must also assign and train personnel, arrange for postattack transportation and communications, procure locally necessary supplies not included in the PDH (food, narcotics, fuel, etc.), and supervise the setting up, staffing, and operation of the hospital.

Packaged Disaster Hospitals have a 30-day supply operational capability. A unit consists of approximately 660 boxes, weighing



Central Supply Section

about 45,000 pounds and requiring 7,500 cubic feet (1,200 square feet) of storage space—33 cubic feet refrigerated storage, 50 cubic feet flammable storage, 1,050 cubic feet heated storage, 6,400 cubic feet general storage.

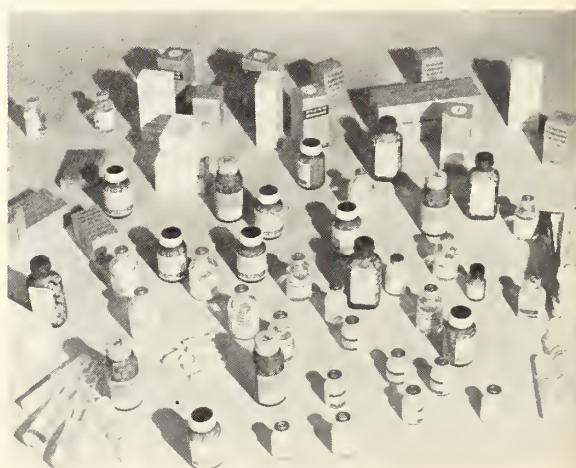
While in storage the component parts of the hospitals are inspected and serviced periodically to insure that the supplies are usable and that the equipment is always operable. Local volunteers familiar with the contents of the packages and the floor plan to be used can perform the setting-up operation. One hundred and twenty man hours is the normal time required for assembling the complete unit.

When assembled, a Packaged Disaster Hospital consists of a fully equipped 200-bed hospital with sections having the following functions:

Admitting and Sorting: Here patients admitted are sorted according to types and

severity of injury and type of medical care required, hospital records are started, and patients are sent to ward indicated by condition.

Wards: These areas are set up at the di-

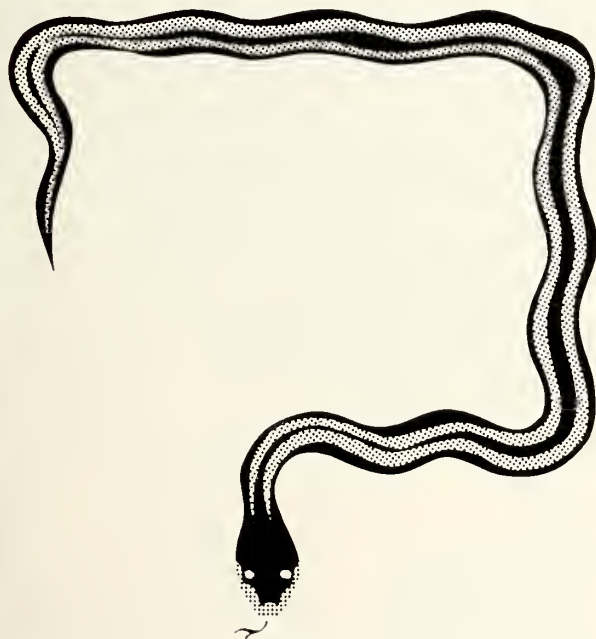


Pharmacy Section

(Continued on Page 166)

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."

CHARMS THE HYPERACTIVE COLON



CANTIL®

(mepenzolate bromide)

helps restore normal motility and tone

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide) —25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL —containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1. Riese, J.A.: Amer. J. Gastroent., 28:541 (Nov.) 1957

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DEPARTMENT OF HEALTH

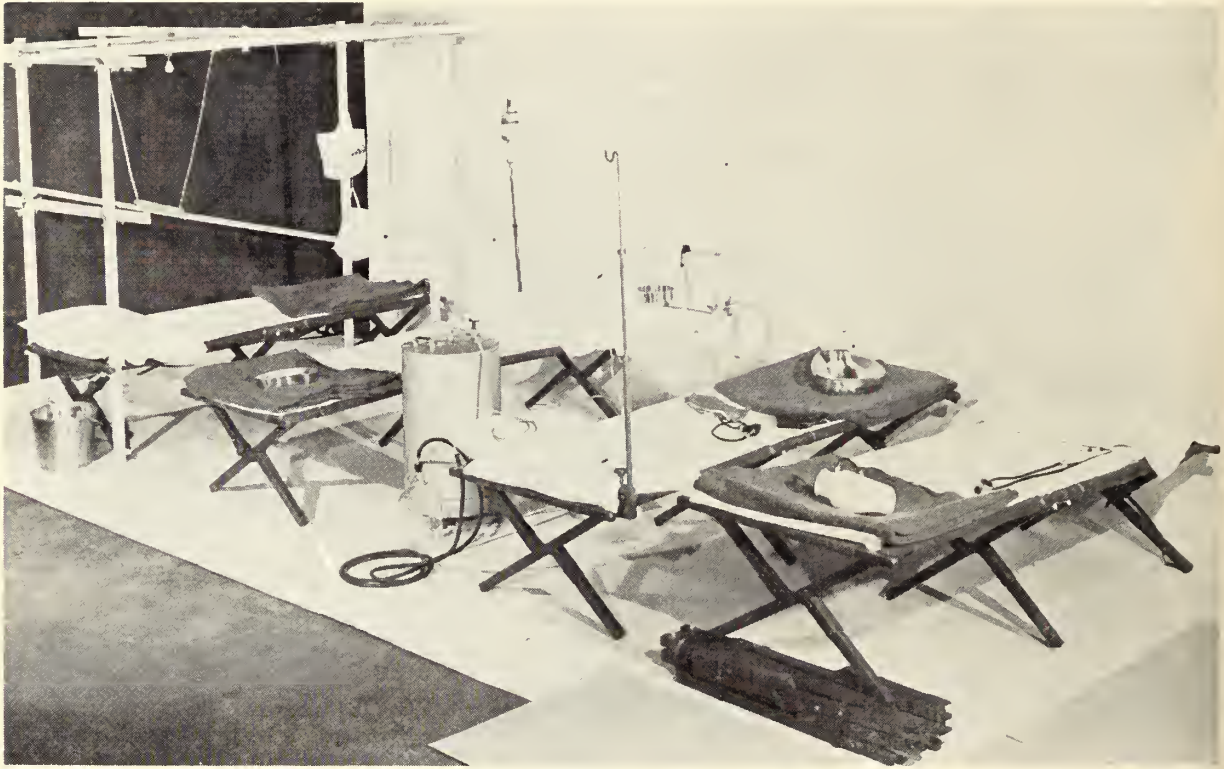
(Continued from Page 164)

rection of the chief of staff, in consultation with the director of nursing, according to the numbers and types of patients received in the hospital.

clinical tests in two categories: urinalysis and blood analysis.

Pharmacy: Pharmaceutical supplies furnish at least one medication in each essential therapeutic category: Anesthetics, anal-

(Continued on Page 168)

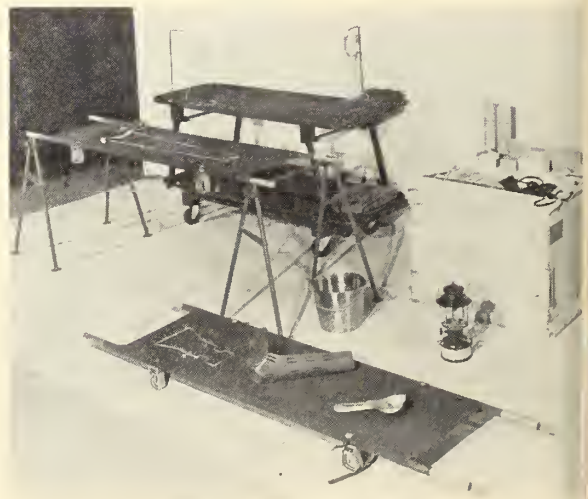


Ward Section

Operating Rooms: The hospital contains equipment and instruments for 3 complete operating rooms. Three anesthesia units of the closed-circuit, gas-oxygen-ether type are included in the operating area.

X-Ray: The X-ray section includes a 15 milliampere X-ray unit with a developing unit to process Polaroid radiographic paper in 60 seconds. It is operated from normal current sources, by its own portable generator, or by the central PDH generator. It is designed primarily for examination of fractures and dislocations and detection of foreign bodies.

Laboratory: The laboratory is supplied with equipment and supplies for the basic



Admitting and Sorting

DACTILASE®

Each tablet contains:

Dactil® (piperidolate hydrochloride), 50 mg.;
Standardized cellulolytic* enzyme, 2 mg.;
Standardized amylolytic enzyme, 15 mg.;
Standardized proteolytic enzyme, 10 mg.;
Pancreatin 3X** (source of lipolytic activity),
100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established.

**As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

WHEN
STOMACHS
ARE ALL
BUTTERFLIES

AND
GAS

In chronic or acute indigestion, fluttery, gassy stomachs obtain prompt, gratifying relief through the antispasmodic, surface anesthetic and enzymatic activity of Dactilase. Dactilase decreases hypermotility and pain and reduces the production of gas. Dactilase does not induce stasis, but helps restore normal tone. It has little or no effect on enzyme secretions, but *adds* enzymes, thus contributing to the digestive efficiency of the patient.

Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

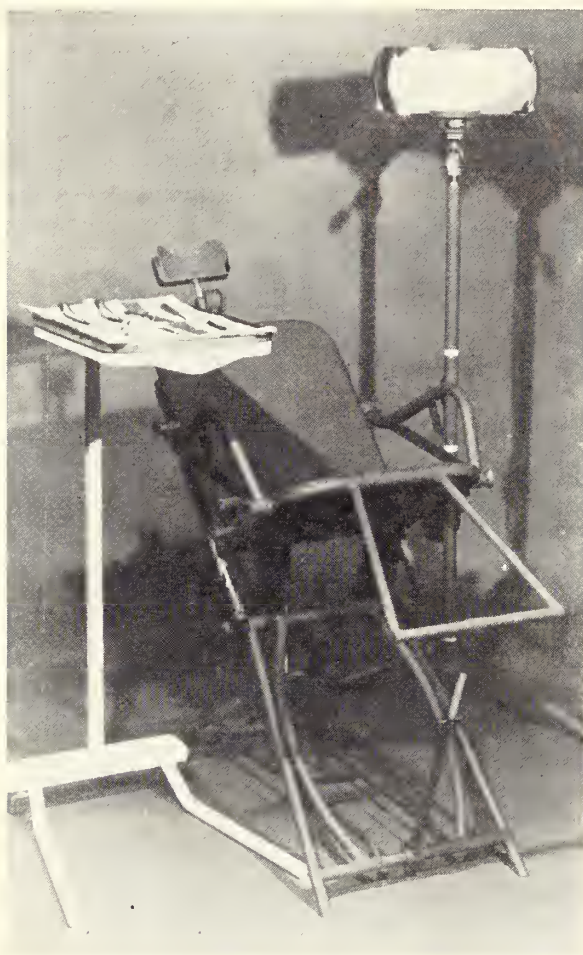
LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201



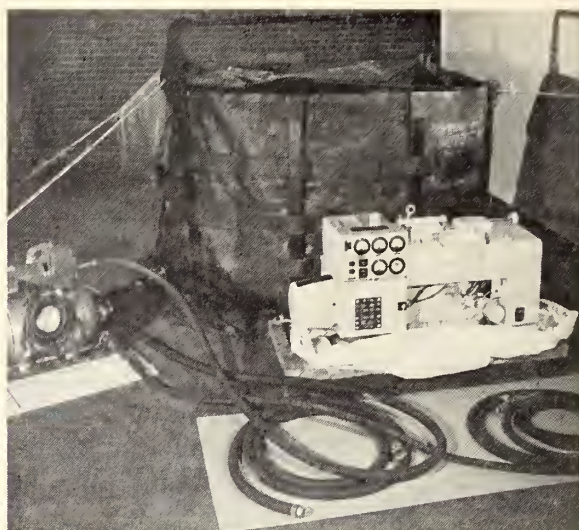
PRODUCTS
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(Continued from Page 166)

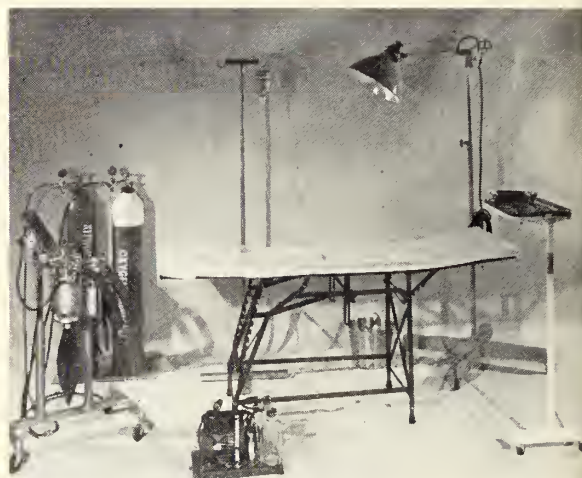
gesics, sedatives, anti-infectants, antiseptics, stimulants, antispasmodics, antihistamines, ophthalmic medications and large volume intravenous solutions including resuscitative fluids. Although most of the drugs are sup-



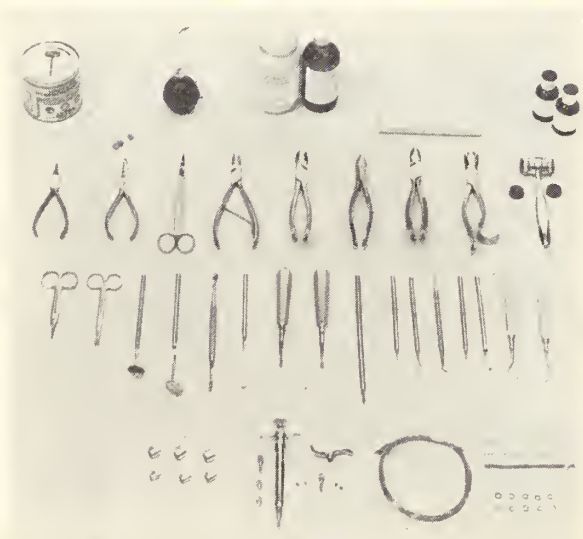
Dental Section



Water and Power Section



Operating Room Section



plied ready for use, some techniques must be applied in the pharmacy before certain drugs can be used.

Central Supply: Central supply is responsible for storing and dispensing nonsterile supplies; and for cleaning and preparing supplies for sterilization, sterilizing them, and dispensing to treatment areas.

Fifty-three Packaged Disaster Hospitals are stored throughout Alabama for use in the event of a nuclear attack or major natural disaster.

(Continued on Page 170)

**WARMTH
FOR COLD
HANDS AND FEET**



For cold hands and feet, nothing beats hot stoves—but they *are* awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients *like* Gerilid and *know* they are getting relief.

GERILID™

Each chewable tablet contains:
nicotinic acid (niacin) 75 mg. and
aminoacetic acid (glycine) 750 mg.

Administration and Dosage: One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

Side effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

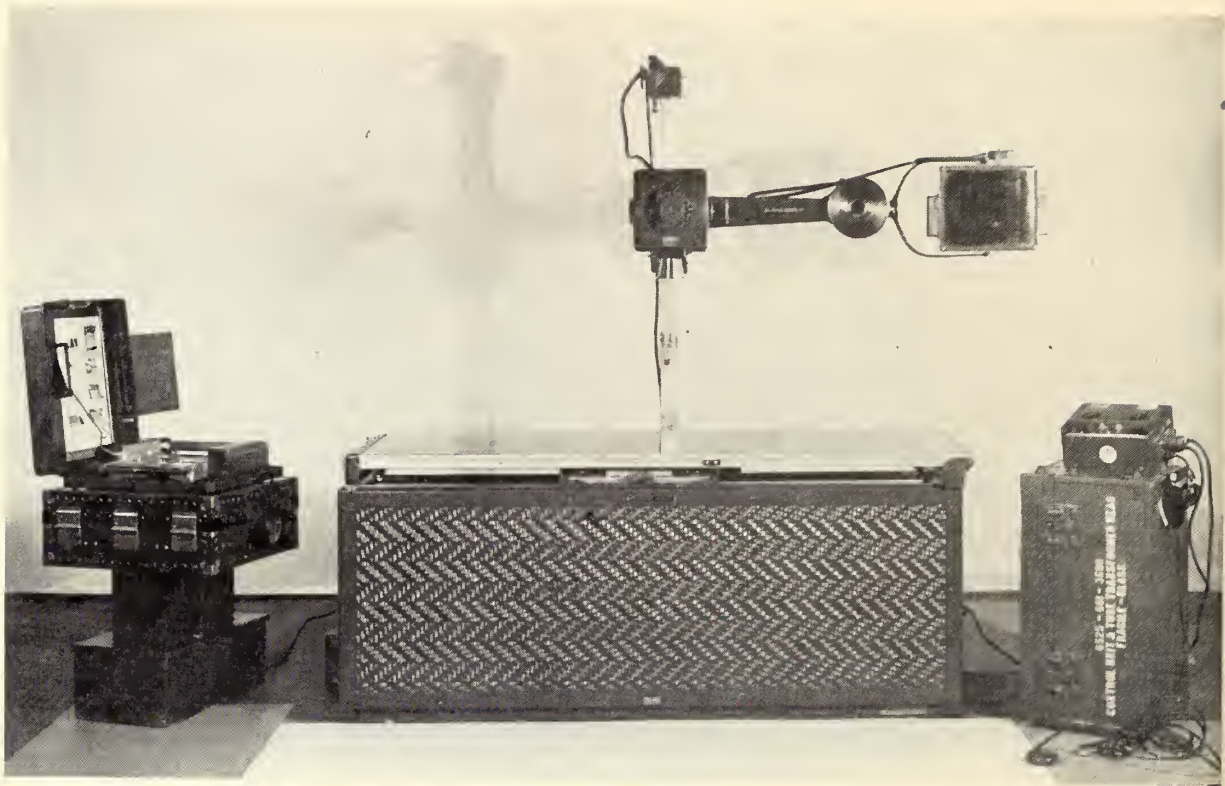
Supplied: Packages of 50 chewable tablets.

Also available in liquid form as Geriliquid®, in bottles of 8 and 16 ounces.

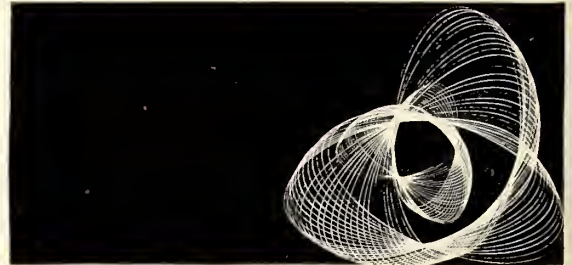
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X-Ray Section



Contributions of Today Weave the Fabric of Tomorrow

Contributors to AMA-ERF are insuring the high quality of American medicine for years ahead. Funds for Medical Schools, Loan Guarantee Program, the Institute for Biomedical Research—it is to these and other programs of merit that your tax-deductible AMA-ERF contribution goes. AMA-ERF is your foundation. By giving it your generous support today, you help weave the fabric of tomorrow.

**American Medical Association
Education and Research Foundation**
535 North Dearborn Street
Chicago, Illinois 60610



WHAT'S THE
COMMON
DENOMINATOR? ... IRON



In fact, there's as much iron...250 mg.
...in a 5 cc. ampul of Imferon (iron dextran
injection) as in a pint of whole blood.
When iron deficient patients are intolerant
of oral iron...or orally administered iron
proves ineffective or impractical...or if
the patient cannot be relied upon to take oral
iron as prescribed, Imferon (iron dextran
injection) dependably increases hemoglobin
and rapidly replenishes iron reserves.

IMFERON® (iron dextran injection)

IN BRIEF: ACTION AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses. Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201



PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY



around the state

COUNTY SOCIETIES MEET

CHEROKEE COUNTY

The Cherokee County Medical Society met June 7 at the Cherokee County Health Department. All six of the society's members were present for the business meeting. The next meeting will be held at 1:30 p. m., September 13 at the Health Department.

CULLMAN COUNTY

Dr. Frank Stitt, Jr., member of the Cullman County Medical Society, was speaker when that county society met June 6. After Dr. Stitt's address on Pancreatic diseases, the County Board of Health reported on the Head Start program. The next meeting will be August 1 at 6:30 p. m. at the Allsteak Cafe.

DeKALB COUNTY

The DeKalb County Medical Society met June 7 at the county hospital. Dr. Charles A. Isbell gave a case presentation. A three-year nursing scholarship was awarded. DeKalb county will next meet July 5 at the hospital.

ESCAMBIA COUNTY

The Escambia County Society met in Brewton on June 8. Mrs. Ann M. Smith, R. N., Director of the Bureau of Nursing, Alabama Department of Public Health, gave the program on Medicare. The next meeting will be in Brewton, September 7 at 7 p. m.

FRANKLIN COUNTY

The Medical Society of Franklin County met June 14 at the North Alabama Hospital in Russellville. Dr. Arthur Calix spoke on "Interesting Pulmonary Cases Encountered in Practice." The program was followed by a discussion of the Nurses Visiting Program under Medicare. The next meeting will be July 12 at 7 p. m., North Alabama Hospital when Dr. Joseph J. McCaughan, Assistant Chief of Surgery, Kennedy General Hospital, will deliver the program.

GREENE COUNTY

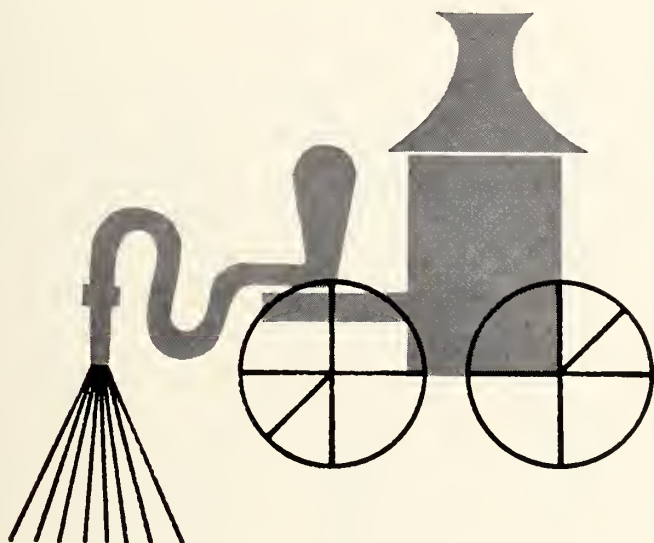
The Greene County Medical Society met June 20 at the Greene County Hospital with all members present. David Patton delivered the address on Medicare. The date of the July meeting is to be announced. A scientific meeting will be shown.

LAUDERDALE COUNTY

An administrative meeting was held June 13 at the Coffee Memorial Hospital by the Lauderdale County Medical Society. Dr. J. G. Shuttleworth and Dr. Jack E. Reagan were elected as new members by transfer from Jefferson County. The next meeting will be at 7:30 p. m., July 11, E. C. M. Hospital.

(Continued on Page 174)

**SAVES
LIVES
SAVES
MONEY
WASTES
WATER**



METAHYDRIN (trichlormethiazide) is prescribed by physicians because it not only approximates the diuretic efficacy of parenteral meralluride injection . . . but, *it is the least expensive of all "brand-name" thiazides.* Therefore, when you prescribe METAHYDRIN (trichlormethiazide) your patients receive the thiazide diuretic that removes a little more salt and water than earlier thiazides, with relatively less loss of potassium . . . and, it's therapy they can more easily afford . . . *only pennies a day.*

METAHYDRIN[®]

(trichlormethiazide)

oral diuretic

Dosage: One 2 or 4 mg. tablet once or twice daily.

Precautions: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

Side Effects: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have occasionally been noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by the administration of thiazides.

Contraindications: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

How Supplied: Bottles of 100 and 1000 tablets.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 5320



**PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY**

(Continued from Page 172)

MARSHALL COUNTY

The June 7 meeting of the Marshall County Medical Society was held at the Val-Monte Resort in Guntersville, Dr. J. Garber Galbraith, neurosurgeon from Birmingham, spoke to the Society on "The Diagnosis and Management of Cerebral Vascular Disease." A discussion of Medicare followed. The next meeting will be July 5, 7:30 p. m., Val-Monte Resort. Dr. Lamar Campbell of Birmingham will discuss "Glaucoma."

PIKE COUNTY

The Medical Society of Pike County held a business meeting June 24 at the Holiday Inn in Troy. A discussion of Medicare was on the agenda. The county society's next meeting will be July 15.

WASHINGTON COUNTY

The Medical Society of Washington County held a combination scientific, business, and social meeting June 10 at the Washington County Hospital. The next meeting will be July 8 at 8 p. m., at the county hospital.

VITAL STATISTICS

The following changes have been made in the 1966 Roster of the Medical Association of the State of Alabama as of July 1, 1966.

NEW MEMBERS

Baugh, Aubrey Thomas, Jr., 1016 South 18th Street, Birmingham, Ala. 35205. (Jefferson County Medical Society.)

Blankenship, Brantle Emmett, University Hospital, 1919 - 7th Avenue South, Birmingham, Ala. 35233. (Jefferson County Medical Society.)

Dozier, Slater Mathew, Noojin Building, Gadsden, Ala. 35901. (Etowah County Medical Society.)

Pappas, Dennis George, 501 Medical Arts Building, Birmingham, Ala. 35205. (Jefferson County Medical Society.)

Robinson, Robert Walker, State Health Department, State Office Building, Montgomery, Ala. 36104. (Montgomery County Medical Society.)

Sanford, Howard Maurice, Jr., Oxford, Ala. 36203. (See Walker County Medical Society.) (Transfer from physician not member to physician member.)

Upchurch, James Conway, Lloyd Noland Hospital, Fairfield, Ala. 35064. (Jefferson County Medical Society.)

CHANGES OF ADDRESS

Bell, Samuel G., Birmingham, Ala., to LCDR, USNR, U. S. Naval Hospital, San Diego, California. (Jefferson County Medical Society.)

Bowers, David E., Athens, Ala., to Decatur, Ala. 35601. (Limestone County Medical Society.)

Bryan, Albert C., Jr., present Huntsville, Ala., to 401 Lowell Drive #2, Huntsville, Ala., 35801. (Madison County Medical Society.)

Davis, William Evans, Greenville, Ala., to 1537 Valley View Drive, Birmingham, Ala., 35209. (Butler County Medical Society.)

Del Vecchio, Pasquale A., present Bessemer, Ala., to 400 - 4th Avenue North, Bessemer, Ala. 35020. (Jefferson County Medical Society.)

Hollis, Charles J., present Mobile, Ala., to 192 Louiselle Street, Mobile, Ala. 36607. (Mobile County Medical Society.)

Lenton, John David, present Huntsville, Ala., to 805 Madison Street, Suite E., Huntsville, Ala. 35802. (Madison County Medical Society.)

McCrory, Ellann, Andalusia, Ala., to Radiology Department, George L. Lanier Me-

(Continued on Page 176)

**BRING IT DOWN
AND
KEEP IT DOWN**

100
102

Metatensin lowers blood pressure and keeps it low—effectively and economically. It combines reserpine with trichlormethiazide which affords more potent saluresis with less loss of potassium than from earlier thiazides. Reserpine contributes antihypertensive effect by relieving anxiety and tension. Metatensin is well-tolerated over long periods; with its effectiveness and economy it assures antihypertensive therapy you and your patients can stay with.

METATENSIN®

Each scored tablet contains:
METAHYDRIN® (trichlormethiazide)
2 mg. or 4 mg. and
Reserpine 0.1 mg.

Usual adult dose: One tablet twice daily. **Precautions and side effects:** Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery.

Contraindications: Complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.

Supplied: Metatensin tablets, 2 mg., 4 mg.—bottles of 100 and 1000.

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VITAL STATISTICS

(Continued from Page 174)

- morial Hospital, Langdale, Ala. 36864. (Covington County Medical Society.)
- Marshall, Samuel P., present Mobile, Ala., to 192 Louiselle Street, Mobile, Ala. 36607. (Mobile County Medical Society.)
- Metzger, William Edgar, Hamilton, Ala., to 2392 Jackson Avenue, Memphis, Tenn. (Marion County Medical Society.)
- CORRECTION: Sorrell, Walker B., present Montgomery, Ala., to 750 Washington Avenue, Montgomery, Ala. 36104. (Montgomery County Medical Society.)
- Owens, William F., Jr., present Tuscaloosa, Ala., to 420 - 10th Street, Tuscaloosa, Ala. 35401. (Tuscaloosa County Medical Society.)
- Rockwell, Donald H., present Mobile, Ala., to 188 Louiselle Street, Mobile, Ala. 36607. (Mobile County Medical Society.)
- Spann, Charles L., present Dothan, Ala., to Plaza Medical Center, 211 West Main Street, Dothan, Ala. 36301. (Houston County Medical Society.)
- Spruell, William H., present Birmingham, Ala., to Rt. 1, Box 183-A, Helena, Ala. 35080. (Jefferson County Medical Society.)
- Striplin, W. H., Jr., present Huntsville, Ala., to 2031 Princeton Boulevard, Huntsville, Ala. 35801. (Madison County Medical Society.)
- Sutherland, Hugh L., Jr., present Huntsville, Ala., to 401 Sivley Road, Huntsville, Ala. 35801. (Madison County Medical Society.)
- Tysinger, D. S., Jr., present Dothan, Ala., to 211 W. Main Street, Dothan, Ala. 36301. (Houston County Medical Society.)
- Wouters, Anne B., present Huntsville, Ala., to 2310 Whitesburg Road, Huntsville, Ala. 35801. (Madison County Medical Society.)

DEATHS

- Barnard, Radford M., Arab, Ala. Deceased April 19, 1966. (Marshall County Medical Society.)
- Klein, Warwick W., Route 2, Altoona, Ala. (Blount County Medical Society.) Deceased June 15, 1966.
- Maneval, Karl Edgar, Haleyville, Ala. (Winston County Medical Society.) Deceased.
- Shuman, Warren G., Montgomery, Ala. (Montgomery County Medical Society.) Deceased June 4, 1966.

TRANSFERS

- Woodall, William Marvin, Jr., Birmingham, Ala. (Transfer from physician member to physician not member.) (Jefferson County Medical Society.)

New Psychiatric Wing Dedication August 20-21

Dedication and open house ceremonies will be held August 20-21 for the new 100-bed psychiatric wing at University of Alabama Hospitals and Clinics in Birmingham. Furnishing and completion of complicated wiring will be necessary before it will be ready for use.

Three million dollars of the construction funds came from the state mental health bond issue of 1959, matched with \$1,240,000 in Hill-Burton money.

Four of the seven main floors will be used for psychiatric treatment. A new emergency room on the main floor will replace the emergency room facilities which now operate out of the basement of a building built in 1902.

The seventh floor of the psychiatric wing will provide 15 octagon-shaped surgical suites, replacing the eight suites now in use at University Hospital. The sixth floor will house a new and expanded radiology department.

When depressed patients say:



"I can't sleep at night"



"I'm tired all day long"

NORPRAMIN[®] (desipramine hydrochloride)

non-sedating • rapid-acting
ANTIDEPRESSANT

helps restore normal patterns of sleep and activity

Norpramin (desipramine hydrochloride) often reverses the signs and symptoms of depression including sleep disturbances, feeling of sadness, guilt, anxiety, worthlessness and bodily complaints without physical basis. In 2-5 days most patients become more hopeful, active and less weighed down by their problems.

Norpramin (desipramine hydrochloride) has only slight sedative qualities, nevertheless sleep disturbances and restlessness are relieved as depression is lifted. If anxiety or tension develop or persist a tranquilizer may be added or dosage reduced. Side effects are usually mild, occurring in about 1 of 4 patients.

Indications: In moderate to severe depression—neurotic or psychotic. **Dosage:** Optimal results are obtained at a dosage of two 25 mg. tablets t.i.d. (150 mg./day). **Contraindications and Precautions:** Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of an MAO inhibitor. Safety in human pregnancy has not been established. **Adverse Effects:** Usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste", sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs. **Supplied:** Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

PRODUCTS FOR PATIENTS YOU SEE EVERY DAY



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TWENTY SEVEN STUDENTS RECEIVE ASSISTANTSHIPS

Twenty-seven students from high schools and colleges in Alabama have been selected to receive assistantships to pursue careers in science and medicine under supervision of faculty members of the University of Alabama Medical Center in Birmingham this summer. A special grant from the Alabama Division of the American Cancer Society and an institutional grant from the national office of the American Cancer Society provide funds for the summer student assistantships.

College students selected for assistantships, their schools, and faculty supervisors include Judy Kennedy of Brewton, Auburn University, Dr. Ivan Roth, microbiology; Trudy McGee of Fairfield, University of Alabama, Dr. Emanuel Cheraskin, oral medicine; David Lawrence Crowson of Huntsville, Birmingham Southern, Dr. Richard Shepard, surgery; William R. Garrett, Montevallo, Alabama College, Dr. Jack Hain, psychiatry.

Russell A. Harden, Columbiana, Alabama College, Dr. Garber Galbraith, neurosurgery; William Lockard, Jr., York, University of Alabama, Dr. George Cassady, Pediatrics; Joe Perry McCrary, Hollywood, University of Alabama, Dr. Charles Kochakian, experimental endocrinology; and the following from Birmingham:

Dianne Seale, University of Alabama, Dr. Stephen Kelly, ophthalmology; Martha Edd Snider, University of Alabama, Dr. Charles Alford, pediatrics; Terry Ellen Widener,

Birmingham Southern, Dr. Robert Cress, physical medicine and rehabilitation; Robert Norwich, Dartmouth, Dr. Samuel Barker, physiology; Leavy W. Oliver, St. Olaf, Dr. Lionel Barger, Jr., surgery; Richard G. Williams, Emory University, Dr. Lemone Yielding, molecular biology; Stephen I. Schabel, Washington University (St. Louis), Dr. J. Marshall Garrett, Medicine.

High school students selected for assistantships, their schools, and faculty supervisors include Roger Sherman Duggar, Haleyville High School, Dr. Marshall Ringsdorf, oral medicine; Bill Roper, Hueytown High School, Dr. Ludwig Kornel, medicine; John Snead, Etowah High School, Dr. Joe Norman, medicine; and the following from Birmingham:

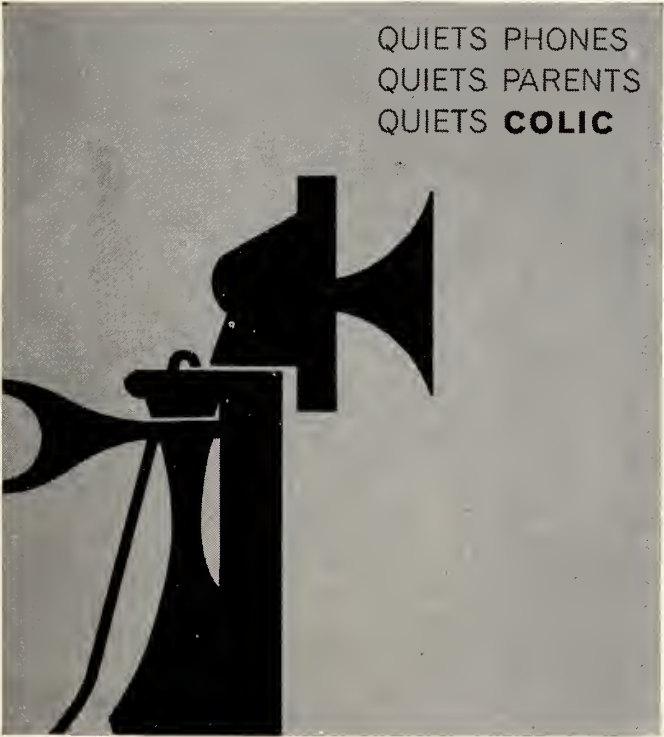
Bill Blackwell, Jr., Indian Springs, Dr. Buris Boshell, medicine; Joseph Gerick, Ensley High, Dr. James Pittman, medicine; William Kirkland Hawley, Indian Springs, Dr. Hugh Dillon, pediatrics; Greg Hodges, Indian Springs, Dr. Sheridan Shirley, urology.

Raymond LeBlanc, John Carroll, Dr. Beulah Hathaway, pathology; Alaric Quan, Shades Valley, Dr. Samuel Little, neurology; Richard Sprague, Indian Springs, Dr. Robert Kreisberg, medicine; Elizabeth Tutwiler, Woodlawn, Dr. Joe Appleton, Engineering; Edwin Williams, The Baylor School, Chattanooga, Dr. Charles Butterworth, medicine; Mary Ann Blair, Banks, Dr. W. N. Jones, obstetrics and gynecology.

SIDE EFFECTS—TRUE OR FALSE?

The (FDA) adverse reaction program is off to a fair start and should get better, but concentration on side effects has put too much information into the hands of the laity and the uninformed, who tend to misinterpret. As a consequence, more side effects are being reported now that aren't really side effects, but rather the imaginations of those who got their hands on medical advertising or package inserts. It is the duty of the manufacturers to provide all the information to the physician about the drugs they make. All side effects should be clearly spelled out for him, but they should not be emphasized over and above the therapeutic activity.—Robert W. Ballard, M. D., in *Food Drug Cosmetic Law Journal*, (21: 31), January 1966.

In colicky infants Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying and improves feeding patterns. It permits sleep and rest for patient and family. The less than hypnotic amount of phenobarbital in the recommended dose affords a mild, calming action and enhances the antispasmodic action of Piptal (pipenzolate bromide). The latter drug, as reported in the medical literature, has a favorable ratio of effectiveness to side-effects which is unusual in anticholinergics and thus is particularly appropriate to pediatric use.



QUIETS PHONES
QUIETS PARENTS
QUIETS **COLIC**

**PEDIATRIC PIPTAL®
WITH
PHENOBARBITAL**

each cc. contains 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol.

Pleasant-tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be given by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. It is contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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FIRST ALABAMA RURAL HEALTH CONFERENCE

Sponsored by Medical Association of the State of Alabama

In Cooperation with the Rural Health Council of Alabama

Wednesday, August 24, 1966

Whitley Hotel

Montgomery, Alabama

9:00 a. m. REGISTRATION—Lobby
Hostesses

MORNING SESSION

10:00 a. m. Call to Order

Presiding
Paul Nickerson, M. D., Chairman
Committee on Rural Health
Medical Association of the State
of Alabama, Sylacauga, Ala-
bama

Invocation

The Reverend Henry L. Lyon,
Jr., Pastor, Highland Avenue
Baptist Church, Montgomery,
Alabama

Introductory Remarks

Welcome

J. O. Finney, M. D., President,
Medical Association of the
State of Alabama, Gadsden,
Alabama

10:20 a. m. POISONING AND POISON
CONTROL

Harry C. Shirkey, M. D., Director
Children's Hospital
Birmingham, Alabama

11:00 a. m. TRAFFIC SAFETY

Mr. A. B. Reddick
Public Affairs Manager
Allstate Insurance Company
Atlanta, Georgia

11:40 a. m. Break

12:15 p. m. LUNCHEON

Presiding

Paul Nickerson, M. D.

Blessing

The Reverend Henry L. Lyon, Jr.

Introduction of Guest Speaker

J. O. Finney, M. D.

1:00 p. m. ADDRESS

Edward R. Annis, M. D., Past
President, American Medical
Association and World Medical
Association, Miami, Florida

AFTERNOON SESSION

Introduction of Speaker

2:15 p. m. William J. Donald, M. D., State
Department of Public Health

Ira L. Myers, M. D., State Health
Officer, State Department of
Public Health, Montgomery,
Alabama

2:45 p. m. SUMMATION

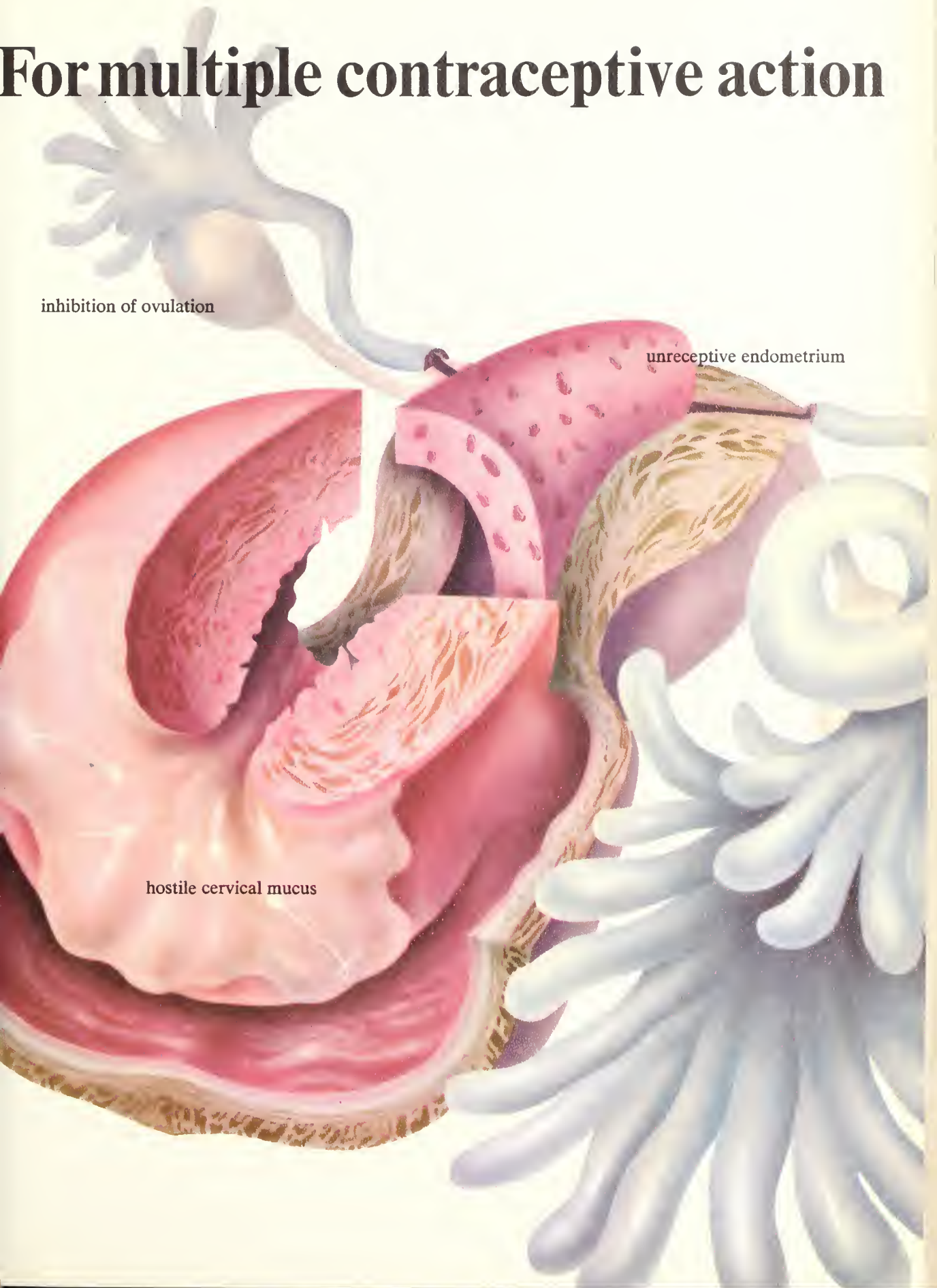
Bond L. Bible, Ph. D., Secretary,
Council on Rural Health, Ameri-
can Medical Association, Chi-
cago, Illinois

For multiple contraceptive action

inhibition of ovulation

unreceptive endometrium

hostile cervical mucus



Norinyl[®] tablets

(norethindrone 2 mg. \bar{c} mestranol 0.1 mg.)

multiple action that has produced a record of unexcelled effectiveness

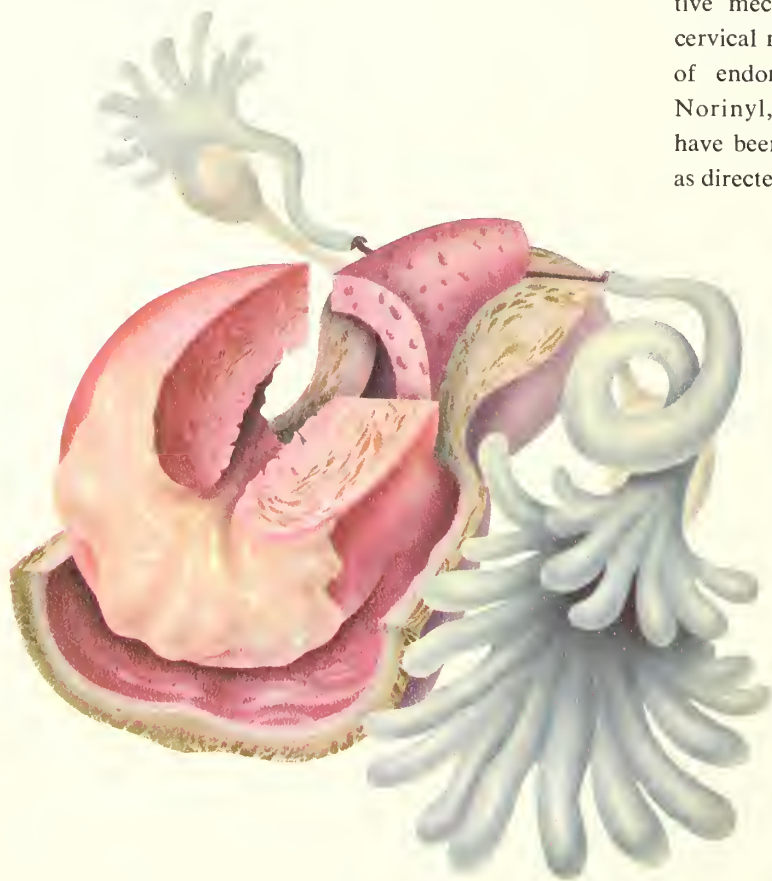
**inhibition of ovulation by means of
2 time-proved hormonal agents**

**production of a cervical mucus hostile to
sperm motility and vitality**

**creation of an endometrium unreceptive
to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Bravans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
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LABORATORIES INC. PALO ALTO, CALIF.

Norinyl[®] tablets
(norethindrone 2 mg. & mestranol 0.1 mg.)

for multiple contraceptive action

Fracture Association To Meet In Venezuela

The 27th annual meeting of the American Fracture Association will meet this Fall in Caracas, Venezuela, at the Macuto-Sheraton Hotel. November 1-5, 1966, Dr. W. Compere Basom, El Paso, President, has announced.

Outstanding speakers on the program are Dr. Oswaldo P. Campos, Rio de Janeiro, Brazil; Dr. Jorge Garcia Arosemena, Panama City, Panama; Dr. Eduardo Alcivar, Guayaquil, Ecuador; Dr. Alfonso Montagne, Lima, Peru; Dr. Ramon I. Fernandez-Torres, Caracas; Dr. Jorge Figarella, Caracas; and Dr. Luis Irigoyen Dotti, Barquisimeto, Venezuela.

Members on the program from the United States include Dr. Dana Street, Professor of Orthopaedic Surgery, University of California at Los Angeles; Dr. Robert Mazet, Jr., Chief, Orthopaedic Surgery, Veterans Administration Hospital, Los Angeles; Dr. Russell D. Harris, Oklahoma City; Dr. Robert B. Elliott, Houston; Dr. Earl D. McBride, Oklahoma City; Dr. J. J. Toland, III, Philadelphia; Dr. Milton C. Cobey, Washington, D. C.; Dr. Garrett Pipkin, Kansas City, Missouri; and Dr. Roger Anderson, Seattle, Washington.

One entire day during the meeting will be spent in attending a meeting to be held by the University of Caracas School of Medicine, under the sponsorship of the Orthopaedic Staff. A post-meeting tour and program has been arranged for San Juan, Puerto Rico, from November 6-10.

All physicians interested in Orthopaedics and in touring Venezuela and Puerto Rico, contact the Vincennes Travel Service, 405 Main Street, Vincennes, Indiana.

Postgraduate Training In Rheumatic Diseases

The Division of Rheumatology, in collaboration with the Division of Continuing Education, is sponsoring an afternoon of postgraduate training in the Rheumatic Diseases. Anyone interested please contact Dr. Gene V. Ball, Division of Rheumatology, Department of Medicine, University of Alabama Medical Center, Birmingham, Alabama, Telephone 325-4011. There will be no charge for the course.

Subject: Symposium, "Rheumatic Diseases: A Variety of Effective Treatment"

Date: August 18, 1966

Place: Room 112, Research Building
1919—7th Avenue, South, Birmingham, Alabama

1:00 P. M.—Introductory Remarks
Howard L. Holley, M. D.

1:10 P. M.—Present Concepts of the Pathogenesis and Treatment of Osteoporosis—Clayton Rich, M. D., Associate Professor of Medicine, The University of Washington School of Medicine

2:10—Clinical Experience with Indomethacin—Norman O. Rothermich, M. D., Clinical Professor of Medicine, Ohio State University College of Medicine

3:10—Rheumatic Disorders of the Upper Extremities—Alonso Portuondo, M. D., Visiting Professor of Medicine, The University of Miami School of Medicine

4:10—Azathioprine Therapy of Auto-immune Disease—Charles C. Corley, Jr., M. D., Associate Professor of Medicine, Emory University School of Medicine

OBITUARY

DR. WARWICK WESLEY KLEIN

Dr. Warwick Wesley Klein, a member of the Blount County Medical Society, died June 15 at his home in Snead at the age of 83.

Dr. Klein came to Blount County after serving as an Army doctor in World War I. He set up one of the first small town hospitals in North Alabama in Altoona. In 1949 he set up a clinic near Snead's Crossroads where he had been practicing until his death.

Dr. Klein became a member of the State Association's Fifty Year Club in 1955. He was a Mason and a Shriner. He received his medical degree from the University of Louisville in 1905.

Surviving are his wife, Bessie Klein; two sons, Coleman Klein of New Orleans and James Klein of Snead; a daughter, Miss Mable Klein of New Orleans; a sister, Miss Mable Klein of Gadsden; and eleven grandchildren.

TB Association Launches Educational Ad Campaign

The National Tuberculosis Association is embarking on a national educational campaign through ads in national magazines and periodicals. Its purpose is to inform our citizens that chronic cough and shortness of breath may be early symptoms of disabling chronic obstructive airway disease and not normal concomitants of middle age.

The principal advice in the ads is: "See your doctor."

Further information or educational material intended for physicians, state tuberculosis and health associations should be contacted.

Sparkling Soft Drinks . . .

**pleasure for
patients
who need
liquids**



Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

Alabama Bottlers Association

P. O. Box 2181

Montgomery, Alabama 36103

Bureau of Vital Statistics

PROVISIONAL BIRTH AND DEATH STATISTICS AND COMPARATIVE DATA

Ralph W. Roberts, M. S., Director

MARCH 1966

APRIL 1966

Live Births Deaths Causes of Death	Number Registered During March 1966			Rates* (Annual Basis)		
	Total	White	Non-White	1966	1965	1964
Live Births	5,492	3,539	1,953	18.4	20.2	20.6
Deaths	2,815	1,883	932	9.4	10.6	9.6
Fetal Deaths	97	49	48	17.4	20.2	20.8
Infant Deaths— under one month	78	48	30	14.2	18.4	20.4
under one year	155	78	77	28.2	33.6	34.0
Maternal Deaths	6		6	10.7	6.6	5.0
Causes of Death						
Tuberculosis, 001-019	24	8	16	8.0	9.1	8.7
Syphilis, 020-029	5	3	2	1.7	2.4	1.7
Dysentery, 045-048	1		1	0.3		
Diphtheria, 055						
Whooping cough, 056					0.3	
Meningococcal infections, 057	1		1	0.3	1.0	0.7
Poliomyelitis, 080, 081					0.3	
Measles, 085					0.7	0.7
Malignant neoplasms, 140-205	371	273	98	124.0	126.5	127.6
Diabetes mellitus, 260	55	34	21	18.4	21.6	12.8
Pellagra, 281					0.3	
Vascular lesions of central nervous system, 330-334	374	250	124	125.0	158.0	136.6
Rheumatic fever, 400-402					0.3	0.3
Diseases of the heart, 410-443	913	679	234	305.3	336.3	311.4
Hypertension with heart disease, 440-443	132	72	60	44.1	42.0	43.7
Diseases of the arteries, 450-456	75	59	16	25.1	26.4	19.8
Influenza, 480-483	21	6	15	7.0	13.5	2.8
Pneumonia, all forms, 490-493	98	54	44	32.8	54.1	39.2
Bronchitis, 500-502	12	7	5	4.0	4.1	2.1
Appendicitis, 550-553	2		2	0.7	0.3	1.4
Intestinal obstruction and hernia, 560, 561, 570	9	4	5	3.0	5.1	5.2
Gastro-enteritis and colitis, under 2, 571.0, 764	6	3	3	2.0	2.7	2.8
Cirrhosis of liver, 581	19	16	3	6.4	7.1	7.3
Diseases of pregnancy and childbirth, 640-689	6		6	10.7	6.6	5.0
Congenital malformations, 750-759	35	25	10	6.4	5.0	4.4
Immaturity at birth, 774-776	26	14	12	4.7	9.2	5.7
Accidents, total, 800-962	220	145	75	73.6	65.6	61.0
Motor vehicle accidents, 810-835, 960	107	71	36	35.8	25.4	27.4
All other defined causes	389	244	145	130.1	131.9	136.6
Ill-defined and unknown causes, 780-793, 795	153	59	94	51.2	62.6	63.8

*Rates: Birth and death—per 1,000 population
 Infant deaths—per 1,000 live births
 Fetal deaths—per 1,000 deliveries
 Maternal deaths—per 10,000 deliveries
 Deaths from specified causes—per 100,000 population

Live Births Deaths Causes of Death	Number Registered During April 1966			Rates* (Annual Basis)		
	Total	White	Non-White	1966	1965	1964
Live Births	5,165	3,397	1,768	17.8	17.8	20.2
Deaths	2,757	1,834	923	9.5	9.1	9.1
Fetal Deaths	116	42	74	22.0	24.3	16.6
Infants Deaths— under one month	90	53	37	17.4	21.4	19.6
under one year	153	77	76	29.6	31.0	30.4
Maternal Deaths	4	2	2	7.6	1.9	14.0
Causes of Death						
Tuberculosis, 001-019	19	7	12	6.6	6.6	6.8
Syphilis, 020-029	4	3	1	1.4	0.7	1.4
Dysentery, 045-048	2	2		0.7	0.3	
Diphtheria, 055						
Whooping cough, 056						
Meningococcal infections, 057	1		1	0.3	0.7	1.1
Poliomyelitis, 080, 081						
Measles, 085						0.4
Malignant neoplasms, 140-205	345	238	107	119.2	119.9	123.2
Diabetes mellitus, 260	60	35	25	20.7	16.1	15.4
Pellagra, 281						
Vascular lesions of central nervous system, 330-334	366	216	150	126.4	120.6	119.3
Rheumatic fever, 400-402					0.3	1.1
Diseases of the heart, 410-443	976	727	249	337.2	302.7	308.8
Hypertension with heart disease, 440-443	134	66	68	46.3	41.2	46.9
Diseases of the arteries, 450-456	63	46	17	21.8	23.8	20.4
Influenza, 480-483	11	2	9	3.8	4.2	0.4
Pneumonia, all forms, 490-493	96	54	42	33.2	33.2	31.2
Bronchitis, 500-502	13	11	2	4.5	1.7	1.1
Appendicitis, 550-553	5	2	3	1.7	0.7	1.8
Intestinal obstruction and hernia, 560, 561, 570	9	6	3	3.1	5.2	2.9
Gastro-enteritis and colitis, under 2, 571.0, 764	4	1	3	1.4	1.0	1.4
Cirrhosis of liver, 581	13	8	5	4.5	6.3	5.7
Diseases of pregnancy and childbirth, 640-689	4	2	2	7.6	1.9	14.0
Congenital malformations, 750-759	33	26	7	6.4	3.9	5.0
Immaturity at birth, 774-776	24	14	10	4.6	6.9	6.6
Accidents, total, 800-962	170	122	48	58.7	60.8	58.4
Motor vehicle accidents, 810-835, 960	79	62	17	27.3	31.5	22.9
All other defined causes	386	256	130	133.4	132.5	125.8
Ill-defined and unknown causes, 780-793, 795	153	56	97	52.9	53.5	53.7

*Rates: Birth and death—per 1,000 population
 Infant deaths—per 1,000 live births
 Fetal deaths—per 1,000 deliveries
 Maternal deaths—per 10,000 deliveries
 Deaths from specified causes—per 100,000 population



**must penicillin
be a bitter pill
to swallow?**

**not if it is
V-Cillin K.**

V-Cillin K now has a unique glossy coating that banishes bitter penicillin taste and makes it easier to swallow. Within six seconds (just long enough for the tablet to get past the taste buds), the coating dissolves and the penicillin is ready for immediate absorption into the bloodstream. The patient still gets all the special benefits of V-Cillin K, including consistent dependability . . . even in the presence of food.

Indications: V-Cillin K is an antibiotic useful in the treatment of infections caused by streptococci, pneumococci, and sensitive strains of staphylococci.

Contraindications and Precautions: Although sensitivity reactions are much less common after oral than after parenteral administration, V-Cillin K should not be administered to patients with a history of allergy

to penicillin. As with any antibiotic, observation for overgrowth of nonsusceptible organisms during treatment is important.

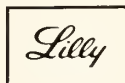
Usual Dosage Range: 125 mg. (200,000 units) three times a day to 250 mg. every four hours.

Supplied: Tablets V-Cillin K, 125 or 250 mg.; also, V-Cillin K, Pediatric, 125 mg. per 5-cc. teaspoonful, in 40, 80, and 150-cc.-size packages.

V-Cillin K[®] Six-Second
Barrier to
Bitterness
**Potassium Phenoxymethyl
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Additional information available to physicians upon request, Eli Lilly and Company, Indianapolis, Indiana 46206.



\$50 DEDUCTIBLE EXPLAINED BY SOCIAL SECURITY AIDE

Here is how Roy L. Swift, Information Officer of the Social Security Administration explains the \$50 deductible feature under Title XVIII, Part B of the Medicare law:

Speaking of medical insurance, I have received many letters from people who don't have a clear understanding of how the yearly \$50 deductible will operate. Some people think they will have to pay this \$50 each year, even if they don't get sick; others think they will have to pay it each time they get sick.

I'd like to try to clear up these questions about the deductible now. First, you will pay this \$50 deductible only if you have expenses covered by medical insurance and you'll pay it just once each year.

Under medical insurance, if you get sick or are injured and need a doctor's care (after July 1), you pay the first \$50 in a calendar year. Then, medical insurance will pay \$4 of every \$5 of the remaining reasonable charges for these services.

Let me give you an example: Suppose a man signs up for medical insurance and starts paying premiums. He was not sick in 1966 or 1967, so all he paid during these years was the \$3 monthly premium. Then in January, 1968, he gets sick and goes to the doctor several times because of his illness, incurring

a \$35 bill for January. He pays all of this bill.

In February, he is no better and sees the doctor still more, running up a \$65 bill. He pays \$15 of this and then medical insurance starts paying benefits. Of the remaining \$50 of the February bill, medical insurance pays \$40 and the individual pays \$10.

Up to this point, this man has had a doctor bill of \$100 and he has paid \$60 himself (the \$50 deductible and one-fifth of the rest) and medical insurance has paid \$40.

In March, this man learns he needs an operation. The doctor's bill for the operation and postoperative care totals \$500. Medical insurance pays \$400 and the individual \$100.

In this example, the total doctor bill was \$600 and medical insurance paid \$440 and the individual paid \$160. Now, if he needs a doctor's care during the rest of the year, medical insurance will continue paying \$4 of every \$5 of the reasonable charge.

There is one point I'd like to emphasize right now. That is that any medical expenses you have this year before July will not count toward your deductible. Only expenses you have beginning July 1 will count toward fulfillment of the 1966 deductible.

(Reprinted from *Modern Maturity*).

NEW TECHNIQUE IN TREATMENT OF CANCER

The spread of cancer in patients with incurable tumors apparently has been halted in certain types of the disease and repressed through use of a new technique. The new method involves injecting tumor material from one patient into another with the same type of tumor and vice versa. Within 10 to 12 days, the recipient's body rejects the alien tumor material. In the process, it produces white cells to combat the disease. By taking blood containing these white cells and injecting it back into the original patient to whose tumor the cells are antagonistic, the patient's blood stream is, in effect, made resistant to his own tumor. Five of the 14 patients in whom the new technique has been tried have had partial remissions of their incurable cancers. In one 28-year-old woman, the cancer lesions disappeared completely within five weeks of the treatment, and remission has continued for 18 months. ("Ca patient 'rejects' his own tumor," in *Medical World News*, 19 November 1965).

EIGHTH NATIONAL CONFERENCE ON MEDICAL ASPECTS OF SPORTS

The Eighth National Conference on the Medical Aspects of Sports, sponsored by the American Medical Association under the auspices of its Committee on the Medical Aspects of Sports, will be held in Las Vegas, Nevada, at Caesar's Palace on November 27, 1966. The Conference is held annually in conjunction with and on the first day of the Clinical Convention of the American Medical Association.

As was true of the previous seven Conferences, the Eighth will cover a wide range of subjects of interest to those serving school and college athletic programs. Included will be forums and discussion sections relating to criteria for immediate management of knee injuries, resources for grass roots supervision of sports, medical preparations for international competitions, and the relationship of athletic fitness to physical fitness. Among the speakers will be Merritt Stiles, M. D., 2nd Vice President of the U. S. Olympic Committee, and Donald O'Donoghue, M. D., President of the American Academy of Orthopedic Surgeons. Robert S. Rocke, M. D., Medical Examiner for the California State Athletic Commission, will address the Conference Luncheon.

The Conference is open to key nonmedical athletic personnel as well as interested physicians. Those who would like to receive further information concerning the Conference should address the Secretary, Committee on the Medical Aspects of Sports, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

Maybe our hospitals would have fewer pedestrian patients if there were more patient pedestrians.—Modern Maturity.

CAREFREE BACHELOR MYTH EXPOSED

Happiest of all in four groups studied—single men, single women, married men and women—is the married man. An unexpected twist in research which challenges the popular view of marriage as a triumph for women, a defeat for men, is exposure of the myth of the carefree bachelor and bitter old maid. In reality, the unmarried man turns out to be more unhappy and maladjusted than either the single or the married woman. The married man on the whole scored highest in a group of questions to measure happiness, high spirits, and job satisfaction. In addition, he worries less and is the least likely of the four groups to feel lonely or depressed. The single man is more likely to be dissatisfied and out of step with the world. He has suffered the greatest amount of stress in childhood and is more likely than other adults to have lived with only one parent. The single woman enjoyed the happiest childhood of all four groups. The study notes that, since most women are eager to marry, those women who escape are likely to be rejects. Far from being happy and gay, the life of the bachelor may become grim. While the single woman maintains many close friendships and family ties, the single man becomes increasingly isolated. Actually, marriage might be a life saver for him as his suicide rate exceeds that of the single woman. (Genevieve Knupfer, M. D., and others: "The mental health of the unmarried," *The American Journal of Psychiatry*, February 1966).

Dermatologists Report

TREATMENT OF HERPES ZOSTER with griseofulvin surprisingly resulted in complete healing with no residual neuralgia in 14 of 18 patients, two Italian dermatologists report. The drug, presently indicated *only for ringworm and other superficial fungous infections*, was given daily for four to 14 days. Drs. S. D. Randazzo and A. Giardina of Turin said that the drug appears to have no direct action on the viruses, but probably modifies their environment, reducing the inflammatory reaction.

Meeting Of American Medical Writers Association Sept. 29

"The Changing World of Medical Communication" will be the theme of the American Medical Writers' Association annual meeting to be held at the Waldorf Astoria, New York City, Thursday, September 29 through Sunday, October 2, 1966.

A varied program of panel discussions, round tables, workshops and plenary sessions is being organized by the Program Committee under the chairmanship of Dr.

Alexander B. Gutman and co-chairmanship of Miss Martha Dana. Miss Alvina Rich Lewis, Secretary-Treasurer of the A.M.W.A., is serving as Chairman of the Local Arrangements Committee, which has planned a variety of social events. Registration is \$15.00 for non-members, free to members. Preliminary programs will soon be available from the National Office of A.M.W.A. at 2000 'P' Street, N. W., Washington, D. C. 20036.

Study Reveals Education Need

With the trend toward a more balanced curriculum, reassessment of educational goals is in progress. Educators are searching for ways to help each individual achieve academic accomplishment, become capable of assuming a responsible role in society, and find satisfaction in living life to the fullest. Because health knowledge is necessary to achieve these goals, health instruction belongs in the curriculum. Lack of it in some schools is reflected in these responses of boys and girls to an exploratory investigation of their health behavior: Use of pep pills and sleeping medications requires no medical supervision; although increasing today, venereal disease has never been a major health problem; physical fitness and endurance naturally increase as adolescents grow up; the purpose of fluoridating water supplies is to purify the water and make it safe to drink. Although no definite conclusions can be drawn about these misconceptions and their origin, they suggest a critical review of current health teaching and consideration of the fact that adult misconceptions influence the health beliefs of young people. (School Health Education Study, 1961-1963, 1201 Sixteenth Street, NW, Washington, D. C.).

Smokers' Death Rate Studied

Cigaret smokers among 250,000 U. S. veterans observed for more than 8 years of a 10-year study continued to have a higher death rate than non-smokers for lung cancer and every other cause with the single exception of Parkinson's disease. In a recent U. S. Public Health Service study, death rates for cigarette smokers were seen to remain fairly constant over the period, while rates for non-smokers went down. Findings of the nearly completed PHS study showed that, in the same age group, 11 times as many smokers as non-smokers died of lung cancer, and 12 times as many died of emphysema. Three or more times as many smokers as non-smokers died of cancer of the mouth, pharynx, esophagus or larynx, and such diseases as bronchitis, asthma, and stomach ulcer. Study results showed mortality risk related to the amount smoked for each form of tobacco use. The risks for cigarette smokers greatly exceeded those for pipe or cigar smokers, and were lower for those who stopped smoking than for those who continued. ("Smokers' Death Rate Studied," in *The AMA News*, 21 March 1966).

Physician Help Requested In Wiskott-Aldrich Study

The co-operation of physicians is requested in a study of patients with Wiskott-Aldrich Syndrome being conducted by the Metabolism Branch of the National Cancer Institute, at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Wiskott-Aldrich Syndrome is an affliction of infants and young children characterized by chronic eczema, thrombocytopenia, hemorrhagic diatheses, and susceptibility to infections. Patients with this syndrome will be admitted for study of their immune status in general and their immunoglobulin metabolism in particular. Full reports of studies done will be made available to the referring physician.

Physicians are asked to supply one milliliter of serum for quantitative determination of immunoglobulin levels on those patients with this syndrome who are unable to come to the National Institutes of Health.

Perils Of Quackery Topic Of National Congress In October

Fads and fallacies in the health field will be the subject of the Third National Congress on Medical Quackery, to be held in Chicago in October.

From 750 to 1,000 representatives of education, government, professional and voluntary health organizations are expected to attend the meeting October 7-8 at the Pick-Congress Hotel.

The AMA and the National Health Council, the nation's largest organization of professional governmental and voluntary agencies in the health field, will be co-sponsors of the Congress.

Details of the program will be announced in the near future. Inquiries should be addressed to John G. Thomsen, M. D., Chairman, American Medical Association Committee on Quackery, 535 North Dearborn Street, Chicago, Illinois 60610.

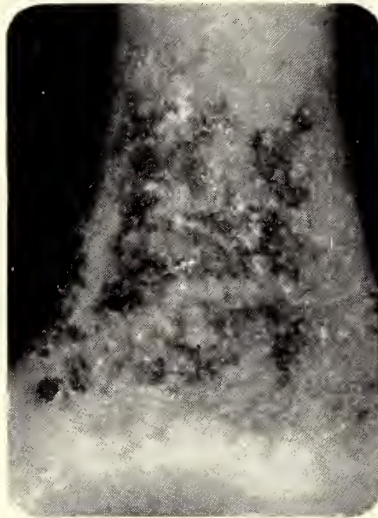
Mortality High in Prolonged Pregnancy

OVERDUE DELIVERY, a gestation period longer than 43 weeks, carries a mortality twice as high as normal deliveries. This was the "most striking" finding of a five-year study of more than 19,600 deliveries by University of California biostatisticians. Dr. Michael A. Zwerdling and associates also reported that prolonged pregnancy is associated with increased infant mortality during the first two years. The figures showed a mortality under one month of age of 11.2 per thousand live births; comparable deaths for the normal gestation period were 5.9. Fetal deaths were 13.4 for overlong pregnancies and 7.0 normals.—*Med. Tribune*, Jan. 17, 1966, p. 1.

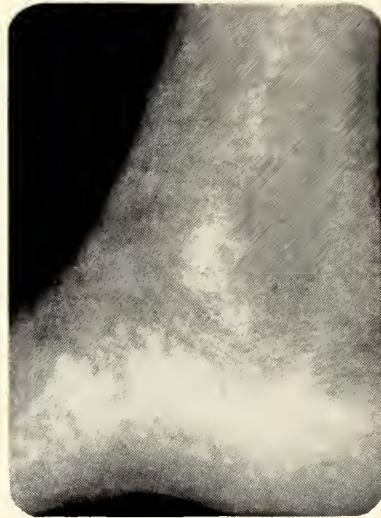
Pointed Or Round-Toed Shoes?

Criticism of pointed-toe shoe styles for children has initiated research on both pointed- and round-toe types. Data from one study reveal that the terms, pointed and round, are only vaguely descriptive and do not provide in a meaningful sense the fitting relationship between the foot and the shoe. So-called footwear size standards were empirically arrived at nearly a century ago, based on a compromise among the then prevailing trial-and-error practices of guild bootmakers. Full understanding of the implications of the shape of the fore part of the shoe can only come through a quantitative measurement of pointedness and correlation of pointedness with quantitative definitions of shoe size. Study of shoe lasts currently in use and their dimensions (size and width designations) gave evidence to substantiate the claim that some pointed-toed shoes may damage and deform the foot. It does not follow, however, that such damage can always be attributed solely to the pointed shape. (R. P. Schwartz, M. D. and A. L. Heath: "Pointed and round-toed shoes," *The Journal of Bone and Joint Surgery*, March 1966).

Eczema of many years... controlled in two weeks



Before treatment



*After treatment —
with ARISTOCORT Topical
Ointment 0.1% for two weeks*

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side

effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyoderma will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

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Triamcinolone Acetonide

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406-G

Youth Offenders To Be Leaders Of Youth

In some of San Francisco's high-delinquency areas, a first-of-its-kind project is underway. Former youth gang leaders, now in special training, soon will be streetworkers in a two-year program aimed to create job opportunities for the trainees in civil service and in private employment. In this pioneering project, overall focus will be on training delinquent and pre-delinquent youth for involvement in a series of anti-delinquency efforts to be conducted in slum areas by community agency officials. Upon completion of the program, the trainees will help organize neighborhood youth councils through which slum area members can participate in community activities. The councils also will be designed to give youth a voice in coping with a number of problem areas involving the community agencies and services affecting them: schools, playgrounds, employment, police, the Welfare Department and the Department of Juvenile Probation. Youth housing committees also are envisioned. Objectives of the program are to determine whether problem youth can be successfully recruited and trained to function as streetworkers; also to measure the influence such trained subprofessionals can exert on groups of their peers by helping channel their energies from delinquent behavior to constructive activities. ("New role for former youth offenders," in *Welfare in Review*, February 1966).

Contaminated Water Found

CONTAMINATED WATER, with dangerously high bacteria counts, has been found in two Hong Kong made items: water-filled teething rings and novelty plastic globes which are frozen and used to cool drinks. Somewhat elevated bacteria counts also have been noted in the water in a few domestic-made rings. Public Health officials are expected to suggest that customers and stores discard both items—foreign or domestic-made.—*Modern Med.*, Jan. 3, 1966, p. 10.

Computer At The Bedside?

As to the evaluation of medicines for efficacy and safety, the computer is not the final and perfect answer, useful though it is. What the physician feels and perceives at the bedside of his patient may not fit into the square, or oblong or round hole of the punch card; but his observations are often a surer guide to the usefulness of a particular medicament for a particular patient. In the interest of the patient—that individual so unique that there is not another entirely like him in the whole wide world—we must be careful lest the scientific pendulum swing too far in the direction of mechanistic technology.—J. Mark Hiebert, M. D., to University of Kansas Pharmacy Colloquium, April 13, 1966.

Cardiac Failure In Infancy Shown In Heart Association Film

Prints of a new medical film, "Cardiac Failure in Infancy," produced for the American Heart Association and its affiliates, are now available on a loan or purchase basis by physicians and medical schools.

The 30-minute, 16mm color and sound film is in two parts. Part I illustrates the manifestations of cardiac failure and their recognition, and Part II the principles of management in both gradual and sudden onset. Also covered are immediate workup, including EKG and X-rays, immediate supportive and subsequent therapy, including digitalis, diuretics, oxygen, positioning, antibiotics, diet and other aspects of non-surgical management.

The film had its premiere showing at the Heart Association's annual Scientific Sessions last October. It was subsequently presented at the annual meeting of the American Academy of Pediatrics and the American Medical Association's Clinical Meeting. A showing is also scheduled of the motion picture at the American College of Cardiology meeting in February.

Prints of the film may be obtained through local Heart Associations.

Tetanus Prevention In Your Reach

If you were offered the opportunity to save 500 people from a dread disease or death, wouldn't you do it? In the United States, there is this opportunity. Each year about 500 cases of tetanus occur and almost half of this number of patients die. While this is not a large number in comparison with the fatalities resulting from heart disease, stroke, cancer, and accidents, deaths from tetanus are preventable through immunization with tetanus toxoid. This type of immunization—by means of a series of injections of the toxoid as your physician advises—provides long-term immunity. No case of tetanus has ever been reported in any civilian who has received four or more doses of tetanus toxoid. If you do not have this protection, it may be necessary in an emergency to have an injection of tetanus antitoxin. An emergency shot is not always effective and people who are allergic to its horse serum base may have serious reactions. When the antitoxin is effective, the immunity it gives is only temporary. Although human tetanus antitoxin produces fewer reactions, it is more expensive than the bovine or equine types. However, it, too, provides only temporary immunity. Since tetanus-producing spores may lie dormant in the soil of your garden, the dirt of your garage, even in the dust inside the house, you can be infected through the tiniest wound, a pin scratch, a bee sting, or a small cut. Gardening and other out-of-doors activities are safer when one has the protection of immunization with tetanus toxoid. (R. B. Windsor, M. D.: "A program for the prevention of tetanus.")

Blood Sugar Termed New Factor In Heart Disease

Another risk factor in the occurrence of coronary heart disease has been found: a nondiabetic rise in blood sugar levels. Results of a survey of nearly all of the 9,500 residents of a town in Michigan suggest that blood sugar levels should be considered along with cholesterol, blood pressure, weight, and smoking as variable factors in heart disease. The investigators developed a new index determining the interrelationship of these variables in coronary heart disease. This index weighs the comparative values of the factors—such as blood pressure, blood sugar, and serum cholesterol—in production of the disease. Since heart disease has long been considered the result of a combination of many environmental and inherited factors, this index can help distinguish the contribution of each to the development of the disease. For example, the Michigan researchers found that the relative prevalence of coronary heart disease among the town's male population was higher in a group in which blood sugar levels only increased than in groups with an increase in blood pressure or serum cholesterol. In women studied, the combination of high blood pressure and high blood sugar seemed more contributory to heart disease than did the combination of high blood sugar and high cholesterol. Studies now in progress will continue to include continual evaluation plus a tabulation of new heart cases to verify the role of blood sugar in heart disease. (L. D. Ostrander, Jr., M. D., and others: "The relationship of cardiovascular disease to hyperglycemia," *Annals of Internal Medicine*, June 1965).

THE IMPORTANCE OF DRUG ADVERTISING

The importance of the advertising industry in the economic development of our country is well-recognized and, more specifically, in the development of use of new and better drugs. Practicing physicians receive a substantial part of their education concerning drugs through the medium of prescription drug advertising. This indeed, is basic and underlies the Federal law which places responsibility on the advertising industry to present factual and undistorted information to the physician. Furthermore, the prescription drug advertising provision of the law actually is a recognition of the importance of such advertising in the entire area of medical care in the United States.—Joseph F. Sadusk, Jr., M. D., in *Current Therapeutic Research*, (7: 332), May 1965.

Work Rating Studied

Findings of a recently reported study should help dispel the gloomy outlook held by some concerning the employability of former psychiatric patients. In the five-year study of on-the-job performance of former mental patients, a psychoneurotic group rated equally in work ability with a control group of subjects matched for age, sex, education, and job description. Although a schizophrenic group—with more hospital admissions and more time spent as inpatients, and a more recent record of psychiatric care—generally compared less favorably with their controls, two-thirds still earned average or superior work ratings. Since the subjects studied represent a special group screened by industry and qualified for employment, these findings should not be generalized as reflecting the employment capabilities of the mentally ill population as a whole. (Nyla J. Cole, M. D., and others: "Work performance ratings of former psychiatric patients," *Journal of Occupational Medicine*, January 1966).

23 Sanitation Grants Awarded

More than \$800,000 has been awarded in support of 23 research projects to develop knowledge which will help the nation solve its solid wastes problems, Surgeon General William H. Stewart of the Public Health Service announced June 13.

The research grants were made in conjunction with a Department of Health, Education, and Welfare national program to improve waste-handling practices now associated with environmental health hazards and blight.

The program was authorized by the new Solid Waste Disposal Act and is being conducted by the Public Health Service's Office of Solid Wastes.

The 23 grants were awarded to 18 different universities, associations, or cities. None of them were awarded in Alabama.

Picture Better Than Words

In developing publicity and educational materials for use in the national campaign against venereal disease, the American Medical Association goes beyond the concept that a picture is worth ten thousand words. Its new 18½ x 23-inch poster is a picture within a picture, symbolizing thousands of words. The poster uses color to dramatize the rapid spread of VD. A single letter is highlighted, then two, then more to make this point: In spite of the spread of the disease, VD can be eliminated. Also stressed in the poster is this advice for eradication of venereal disease:

- Learn the facts.
- Avoid VD contacts.
- Confide in your physician.

A complimentary copy of the poster will be forwarded to schools upon request. (Department of Health Education: "VD can be eliminated," American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610).

"Lazy Eye" Corrected

Approximately two per cent of our school children have amblyopia or "lazy eye," the nation's No. 1 cause of partial blindness in children. Such children, called amblyotic, have one weak or blurry eye, the use of which they suppress until it gradually grows useless. If detected when the child is no older than three or four years of age, amblyopia can be corrected. With the aim of checking the threat of "lazy eye," a number of woman's auxiliaries of state medical societies are cooperating in screening programs. In Windham County, Connecticut, auxiliary volunteers spend one morning a month during the school year working in preschool visual screening clinics. Last summer, in screening 50 children enrolled in the Head Start program they discovered three needing medical attention. ("Let's put a stop to 'lazy eye' blindness," in *M. D.'s Wife*, March 1966).

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Labor Savers For Handicapped

Supplementing muscle power by the use of machines and modern equipment does not always result in individual use of the energy saved for exercises and in other ways to attain the benefits of fitness. With the homemaker and the handicapped, the story is different. The homemaker may find that savings in energy through labor-saving devices enable her to participate more extensively in other activities in the home and in the community. Through current research it is hoped to make life easier for the disabled person who—the paraplegic for example—spends more energy in walking than normal subjects do. Examples of work accomplished in this area are the US Department of Agriculture's energy saving kitchen, the work simplification aids for the kitchen planned by an American Heart Association subcommittee, and programs of the Institute of Physical Medicine and Rehabilitation of the New York University Bellevue Medical Center. Although, in some cases, units were planned for the handicapped and in others for the homemaker, their basic energy-saving elements appeal to both. Among factors to be considered in planning energy-conserving equipment are:

- Sit-down activity for least energy expenditure;
- Proper work heights to encourage good posture—vertical and horizontal reaches;
- Storage at specific work places to reduce bending and reaching motions;
- Space requirements for those in wheel chairs and for maneuvering the chair.
- Consideration of individual requirements. For example, energy requirements for standing up from a low chair were considerably greater than from a high chair. Taking this finding into account in the height of a chair, the height of a bed, and in other furniture design would make life easier for patients with only one functional leg. (Dorothy W. Gilbert: "Energy expenditures for the disabled homemaker," *The American Journal of Occupational Therapy*. November-December 1965).

Should Athletes Swim

As research proves them to be fallacies, old fears and misconceptions about training programs for athletes gradually are fading away. Among the most recent to go is the taboo against swimming for non-aquatic athletes who seek to be in top shape. Swimming and training for other sports are not only compatible but can be mutually supportive. Swimmers now are weight training to gain added power in their strokes. Other athletes, including trackmen and football players, are swimming in and out of season for relaxation and fitness. Their coaches and trainers, freed from old fears, are taking advantage of basic principles of muscle physiology:

- A muscle responds according to the nature of the demands placed upon it.
- Brief maximal or near-maximal work yields the type of strength helpful in all-out short-burst performances.
- Repetitive submaximal work yields the type of strength helpful in prolonged endurance performances.
- Stretching exercises combined with the above yield a firm but flexible agility.

Swimming by itself will not ensure the degree of leg strength desired to ready a tackle or halfback for contact play, because in swimming the knee is not overloaded throughout its range of motion. Moreover, water does not give sufficient resistance to demand single maximal efforts. However, swimming does not detract from the strength gained through other activities in the training regimen. Each sport imposes certain implications for fitness that may convert a particular component of readiness from helpful to essential. Swimming is the one activity that may be used for recreation one day and for survival on another. A tonic for the able, it can also be enjoyable and a therapy for the disabled. (Comment by the National Federation of State High School Athletic Associations and the AMA Committee on the Medical Aspects of Sports, July 1965).

CONTRACT SIGNED FOR CONTINUING EDUCATION CENTER

A continuing education demonstration center for physicians and other personnel is the long range goal of a contract signed May 2 by the U. S. Public Health Service's Division of Community Health Services and the University of Illinois, College of Medicine. The center, which is to be developed by the University of Illinois, will serve as a model for the ultimate establishment of similar centers in other institutions of higher continuing education facilities.

The functions of the demonstration center will be to increase knowledge about continuing education practices and to train persons to conduct effective continuing education programs in medical schools, community hospitals, medical societies, health agencies and other organizations.

When completed, the center will conduct research and demonstration projects on all aspects of continuing education, develop curricula and educational materials, establish criteria for evaluating continuing education

activities, and serve as a training facility for faculty members.

The first phase of the contract calls for the University of Illinois to define the functions and work of the center and to implement specific projects for which planning has been done. The actual development of the first demonstration center at the University of Illinois will be accomplished over a period of several years.

A budget of \$233,113 has been allocated by the Division of Community Health Services to the University of Illinois for the first phase (12 months) of the project.

As part of the contract, the University of Illinois will design a system for setting continuing medical education priority needs. The system was tested at Rockford Memorial Hospital in Rockford, Illinois, under a Public Health Service contract and will be tested in two other hospitals.

NEW EMPHASIS ON SPEECH AND HEARING PROBLEMS

A three-year project will soon be under way to provide additional diagnostic and rehabilitative help to Kentuckians—especially children with difficulties in language understanding and expression, hearing, speech. During the first year of the project, plans call for establishment of a diagnostic clinic for communicative disorders at the Elizabethtown Regional Hearing Center, and expansion of the ear, nose, and throat clinic at the Barbourville Regional Hearing Center. Clinics at these centers, each of which serves some 20 surrounding counties, will be staffed by an ear, nose, and throat specialist, a pediatrician, a neurologist, and a psychologist. Social work consultation will be available. A health educator will be added to the Elizabethtown Center to work with community groups as well as with patients and parents of patients. In the second year of the project, similar expanded services in hearing and speech are planned for the Paducah Regional Center and the counties it serves. A new hearing center, the fourth in Kentucky, is planned for the northeastern area during the third year of the project. ("New emphasis on speech and hearing problems," in *News & Plans*, Kentucky State Department of Health, August 1965).

Once merely a man with HAY FEVER— Now a victim of his own antibodies

Whatever term describes him in this new era of immunology, the symptoms of congested nose, rhinorrhea and sneezing haven't changed in patients hypersensitive to pollens and molds. But **NTZ**[®] Nasal Spray relieves the symptoms. It decongests nasal membranes on contact, relieves itching and reduces excessive rhinorrhea without unpleasant dryness. The first spray of well-tolerated **NTZ** shrinks the turbinates, helps restore normal nasal ventilation and eases breathing. After a few minutes, a second spray enhances sinus ventilation and drainage.

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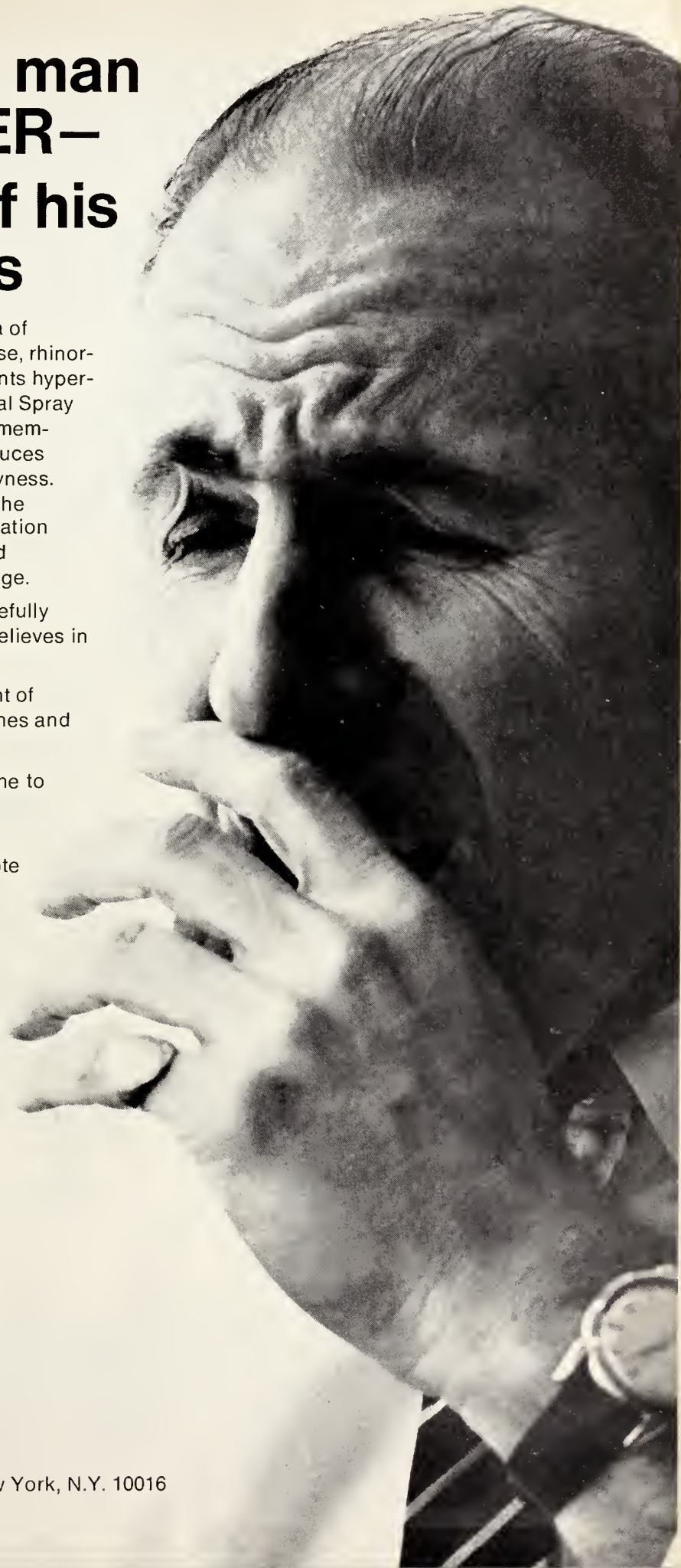
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It May Be Better To Be Average

Besides being neither too young nor too old, it is better for the expectant mother to be neither too thin nor too fat. Underweight women seem more apt to undergo premature deliveries and face more complications in childbirth than women of average weight. In a group of 100 pregnant women—each subject weighing less than 100 pounds before pregnancy and considered 20 to 40 per cent underweight—the incidence of primary cesarean section, midforceps delivery, endometritis—inflammation of the lining of the uterus—was higher than among 2,781 women of average weight studied during the same two-year period. The underweight women had no other serious health problems and toxemia of pregnancy was less in this group, affecting only one per cent. ("Birth woes heavy in underweight mothers," *Medical World News*, 8 April 1966).

Deep Sleep A Vital Need

An implication of recent studies on sleep is that deep sleep—which lasts an average of 92 minutes during seven and one-half hours of sleep—is the stage of sleep most vitally needed. Investigators studied the sleep patterns of eight healthy students by charting the changes in brain waves as the students proceeded from light stages of sleep into the very deep sleep stage. These stages, numbered one through four, show up distinctly different brain wave patterns on an electroencephalogram. Stage one also is accompanied by rapid eye movements (REM) which other investigators have coupled with periods of dreaming. When sleep was restricted to three hours, the amount of deep sleep was reduced to 86 minutes, only six minutes less than the amount a person gets during the seven and one-half hours considered normal. Other levels of sleep receded sharply to allow deep sleep to occupy almost as many minutes as in the longer period. "‘Deep sleep’ corners prime time," in "*Medical World News*," 11 March 1966).

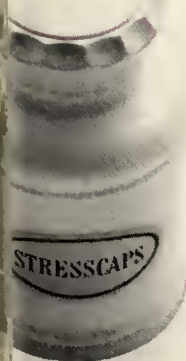
Educator Mental Health Agent

Since practically all children come into close contact with public school teachers, teachers are in the best possible position to serve as agents in preventive mental health programs. Many normal classroom activities are or could be therapeutic. With close cooperation between the clinical team and the educator, the handicapped or the nonhospitalized disturbed child can receive useful guidance during the regular school day. (Carolynn Stevens: "The educator as a mental health agent," *Virginia Medical Monthly*, March 1966). In general, school programs should promote positive mental health in all children and youth, prevent emotional disturbances, and help pupils with emotional problems. The school's role in preventing emotional ill health may be carried on at several levels. Primary prevention lies in providing an environment which promotes optimal personality growth for each pupil. Secondary prevention aims at early recognition of vulnerable children and provision of special help before serious illness develops. For more specialized help than the educator and guidance counselor can provide, schools are employing psychologists, social workers, and psychiatrist, or are served by such personnel from community mental health services. The need for more specific education in working with the emotionally disturbed child is under consideration by institutions preparing teachers. It is recognized that a five-year course is barely sufficient to give the beginning teacher a general liberal arts education, a specific educational theory and technical experience, and a grounding in mental health and human relations. (*Mental health and school health services*, a publication of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, 1965).



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Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

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OFFICERS ELECTED BY STUDENT AMERICAN MEDICAL ASS'N.

CHICAGO—Blair Behringer, a 31-year old junior medical student at the University of Missouri, has been elected president of the Student American Medical Association for the 1966-67 year.

Behringer was named to this post at the 16th annual meeting of SAMA held last week in Los Angeles.

Elected as vice-president of SAMA was John W. Olds, a junior at the University of Tennessee Medical School; and as treasurer, Richard J. Flanigan, a sophomore at Jefferson Medical College.

Behringer, a commissioned Captain in the United States Air Force and has more than 2000 hours of time as a B-47 and B-52 pilot, was president of the SAMA chapter at Missouri. In 1965-66, he served the national organization as treasurer. He stands in the upper 5% of his class.

The new SAMA president was born in Jackson Heights, New York, and did his undergraduate work at MIT and Missouri. He is married and has one child.

Olds, also 31 years old and married, was born in Panama and holds a B. S. degree

from Iowa State University. Prior to entering medical school, he was enrolled at Colorado State University, where he completed five quarters in veterinary medicine.

Vice President Olds is in the top 10% of his class at the University of Tennessee and has been active in both local and national SAMA activities.

Flanigan, a SAMA chapter president, has won extracurricular recognition for his excellence in rowing. He was a member of the U. S. Olympic Rowing Team at the Pre-Olympic Games in Tokyo in 1963, the U. S. Rowing team at the Pan-American Games in 1963 and the U. S. Rowing Team at the World's Rowing Championships in 1962. He won first place in the U. S. National Rowing Championships in 1960 and 1963 and in the Canadian Rowing Championships in 1961 and 1963.

He holds a B. S. in Chemistry from St. Joseph's College in Philadelphia and worked for a masters in chemistry at Villanova. Prior to entering medical school, he served as a high school teacher and was employed as an industrial chemist.

The Case Of The Therapeutic Establishment

The problems and responsibilities of government in assuring the safe use of drugs are indeed formidable. . . . This brings up the whole question of efficacy and of relative efficacy; and who is going to dogmatize on this? Again, who is going to say that the occasional fatal toxic reactions which may result, for instance, from the use of psychotropic drugs in depressive illnesses are or are not greater than the danger of an increased incidence of suicide if such drugs are forbidden. Doubtless a committee of experts will advise the appropriate Ministers, and if experts are occasionally wrong they are less often wrong than non-experts. Nevertheless, we interfere with the prescribing doctor's final freedom of decision at our peril in a free democracy. It is easy to set up a sort of pontifical therapeutic Establishment; but Establishments—Aristotle and Galen, for instance—have not always been in the van of progress. — Sir Derrick Dunlop, M. D., in *British Medical Journal*, (2:440-441), August 21, 1965.

TOTAL OF 19,000 SCIENTISTS ANTICIPATED

The Nation's prescription pharmaceutical manufacturers—the largest industrial employer of health-related research workers in the United States—anticipate adding another 2,500 scientists and supporting personnel by the end of 1968. By that year, 19,000 scientists and technicians will be engaged in research and development in the industry, according to an analytical report "Trends in R & D Manpower in the Pharmaceutical Industry, 1959-65 and 1968." The report is being released jointly today by the National Institutes of Health, Public Health Service, DHEW, and the Pharmaceutical Manufacturers Association.

The major findings of this analysis, based upon information obtained by the Association from 100 of its member firms are as follows:

- Employment of R & D personnel in the industry increased by 5,000 from 11,400 to 16,400 in the six-year period 1959-65; the 1968 projections indicate an annual growth rate of six per cent for the entire period, 1959-68.
- During the last five years the industry has maintained a high degree of stability in the make-up of its R & D staff:
 - of each 100 R & D personnel, 55 are scientists and professionals and the remainder are technicians and supporting staff
 - about one-quarter of the staff hold a doctoral degree, one-third a Master's or Bachelor's degree and two-fifths have less than a Bachelor's degree.

— bioscientists and chemists, in equal proportions, make up the great bulk (80 per cent) of scientific and professional R & D staffs; clinical medical scientists and other specialists account for the remainder.

- Women scientists comprise about one-sixth of the industry's R & D professional staff, and are working chiefly as bioscientists or chemists.
- Three of every 10 R & D employees hired by the industry in 1964 had a doctoral degree. One-half of the scientific and professional personnel joining the industry's R & D staff that year came from educational institutions; industrial firms and other organizations provided the remainder, with a ratio of 4 from industry to 1 from other sources.
- In 1965, the pharmaceutical industry accounted for about one-fifth of the \$1.9 billion national total for the conduct of medical R & D by all performers.

Single copies of the report "Trends in R & D Manpower in the Pharmaceutical Industry, 1959-65 and 1968" (Resources for Medical Research Report No. 8), may be obtained without charge from the Public Health Service, Department of Health, Education, and Welfare, Washington, D. C. 20201 or from the Pharmaceutical Manufacturers Association, 1155 Fifteenth Street N. W., Washington, D. C. 20005. Multiple copies may be purchased at 25 cents each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

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Precautions: Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses.

Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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Ob-Gyn, age 32, protestant, married; Univ. of Tenn. 1958; Certified Am. Bds.; completing AF duty Sept. 1966; Seeking group or associate practice. LW-52

Gen. Surg., age 34, Catholic, married; Univ. of Tenn. 1955; Certified Am. Boards; completed USAF duty, seeking location with assoc. LW-53

Misc., pharmaceutical, insurance, medical supply, etc.; age 43, protestant. Board eligible in Urology; retired Naval Officer; seeking regular hours. LW-54

Neurosurgery, age 33, protestant, married; Univ. of Tenn. 1959; military oblig. completed; Elig. Am. Boards; seeking location in solo, group, or association. LW-55

Ophthalmology, Age 27, protestant, married; Univ. of Nebraska 1963; Eligible Am. Boards; Available Sept. 1967; seeking location in solo, group, ind. or instit. practice. LW-56

General Pract. with Surgery, age 51, ret. med. officer; protestant, married; Ohio State Univ. 1943; certified Am. Boards; seeking location solo, indus. or instit, or association. LW-57

Gen. Pract.-Industrial, age 28, protestant, married; Med. Coll. of S. Carolina 1962; Completed military oblig.; seeking location industrial practice. Available immed. LW-58

Gen. Surgery, age 32, Jewish, married; Univ. of New York 1959; Elig. Am. Boards; Seeking location in group or assoc.; Presently serving military duty, available Oct. 1966. LW-59

Int. Med., age 35, protestant, single; Univ. of Pittsburgh 1957; completed military oblig.; certified Am. Boards; seeking location group, indus., assoc. or instit. LW-60

Pediatrics, Female, age 26, Catholic, single; Med. Coll. of Alabama 1963; seeking location in town over 50,000. Completed residency July 1966 in Pediatrics. LW-61

PHYSICIANS WANTED

Medical Clinic in suburban Birmingham with three partners seeking general practitioner with special interest in surgery or int. med. One year salary basis with future partnership if desired by both parties. PW-31

Large hospital and nursing home in N. E. Ala. seeking one or two additional gen. practitioners for town of 7,000. Staff privileges open; living and office space available; princip. source of income textiles, civil serv., rubber plants, etc. Church and schools excellent; Lakes and streams abundant. PW-32

Town in Greene County of 2,348 pop. needs physician. Eqpt. for sale. Hospitals located 28 miles away with open membership on staffs. Princ. sources of income, lumber, farming, small business. Six churches, three schools. PW-33

S. Central town of 1,200 serving trade area over 3,000, needs physician for gen. pract. and surgery. New 27-bed hospital with open membership on staff. Principal sources of income diversified among lumber mills, toys and garment factories; pulpwood industries, farming and cattle. Very near educational centers of state; three schools and three churches; only 150 miles from Gulf Coast. PW-34

NE town of 3,000 seeking physician. Last physician died. Town has 30-bed hospital with new hospitals in adjacent towns. Industries provide the principal sources of income; Excellent schools and churches. Housing available. PW-35

SE Ala. town needs physician. City-owned clinic offered rent-free, fully eqpd. Nearest hospitals 10 and 18 miles away; membership open on staffs. Five excellent churches, large high school, and active club groups. Agriculture, industries and military bases provide substantial income. Ninety miles to Gulf of Mexico beaches. PW-36

S. Ala. town of 1,200 population in large trade area needs GP. Hosp. facil. available 25 miles, open membership on staff. Office space available rent-free. Housing available; principal income from industries, pulpwood, forestry management, paper mills. Excellent churches and schools; ample social activities; close proximity to Gulf of Mexico beaches. PW-37

Seminar On Cardiovascular Emergencies

The American College of Cardiology and the University of Florida College of Medicine will be presenting a seminar on Cardiovascular Emergencies September 22-24, 1966. This program is dedicated to such topics as shock, acute hypertension, acute myocardial infarct, cardiac arrest, cardiac arrhythmias, etc.

GUEST FACULTY

Jack H. Bloch, M. D., Department of Surgery, University of Minnesota, Minneapolis.

Ray W. Gifford, Jr., M. D., Department of Hypertension and Renal Diseases, Cleveland Clinic.

Henry J. L. Marriot, M. D., H. Milton

Rogers Heart Foundation, St. Petersburg, Florida.

Robert A. Miller, M. D., Associate Professor, Department of Pediatrics, University of Illinois, Chicago.

Andrew G. Wallace, M. D., Assistant Professor, Department of Medicine, Duke University, Durham, N. C.

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For further information write to: Dr. Myron W. Wheat, Jr., Division of Thoracic and Cardiovascular Surgery or The Division of Postgraduate Education, College of Medicine, Gainesville, Florida.

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Food For Thought

Has the family food bill increased? Facts show that while the average household does spend more on food than it once did, it spends a smaller proportion of its income on food each year: In 1939, 23 per cent of the average family's disposable income went for food. In 1964, 19 per cent was spent. Two developments might explain the discrepancy between what has happened and what the homemaker thinks has happened: 1) A large segment of the weekly grocery bill is for non-food items, and 2) Food items are more numerous and much closer to table readiness than they were, offering economies in preparation and cooking time. While these economies do not affect the pocketbook directly, they become apparent in a review of the family budget. (J. W. Markham: "The food industry and dynamic competition," *HEIB National News Notes*, March 1966).

Backache in Young Women

CHRONIC BACKACHE in young women, particularly following pregnancy, is caused by a sedentary life pattern and lack of physical exercise and sports activity from childhood on, according to Dr. Evalyn S. Gendel of the Kansas Department of Health. Of 35 women, ages 18 to 23, who complained of constant backache after delivery, none had ever ridden a bicycle, none were exercise walkers, none had been active in team, individual sports or calisthenics, none had participated in social sports such as golfing, skating or bowling, and only one or two cared for dancing. Their symptoms were relieved in most cases over a 3- to 10-month period of gradual physical conditioning.—*J.A.M.A.*, Dec. 13, 1965, p. 41.

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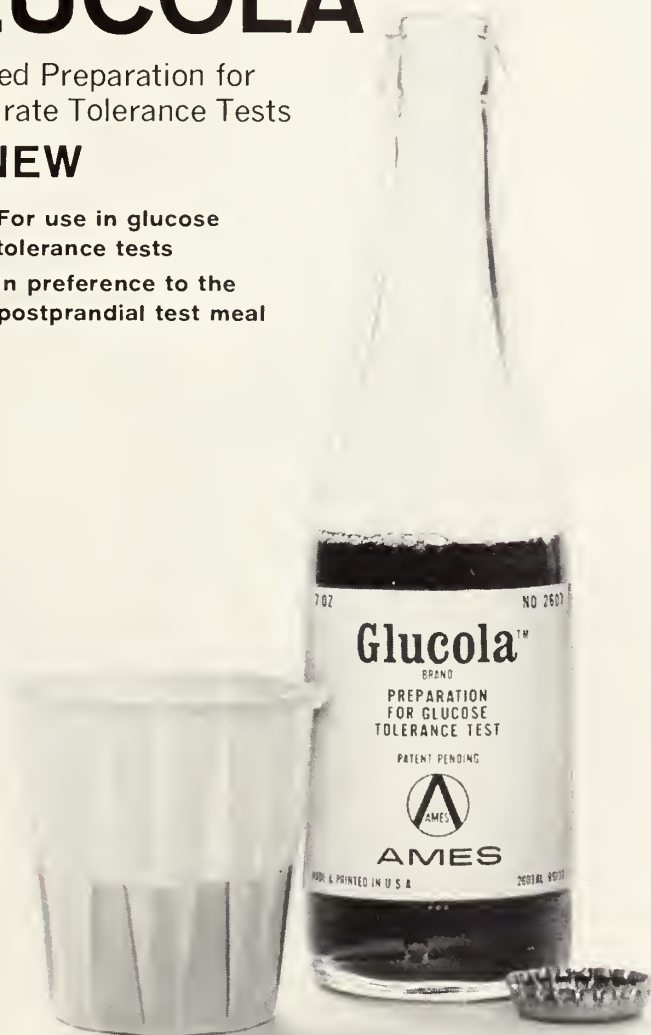
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Chest Pain: a somatic mask of psychic tension?

"Heart symptoms"—chest pain, tachycardia, arrhythmia—invariably alarm and preoccupy the patient, though they may be completely without organic basis. Such symptoms often are somatic masks of psychic tension, arising from constant encounters with stressful situations.

When the problem is diagnosed as emotionally produced, consider Valium (diazepam) as adjunctive therapy. Valium (diazepam) acts rapidly to calm the patient, to reduce his psychic tension and relieve associated cardiovascular complaints.

NEUROTIC FATIGUE—the chronic tiredness resulting from emotional strain which so often accompanies psychogenic "heart" symptoms—also can be alleviated by this highly useful agent. Valium (diazepam) often achieves results where other psychotherapeutic agents have failed.

Valium (diazepam) is generally well tolerated, and usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazard-

ous procedures until correct maintenance dosage is established during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations); changes in EEG patterns. Abrupt cessation after prolonged use may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlorthalidone HCl.

Dosage — Adults: Mild to moderate psychoneurotic reactions, 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 h, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients, 1 or 2 mg/day initially, increase gradually as needed.

Supplied: Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 for convenience and economy in prescribing.

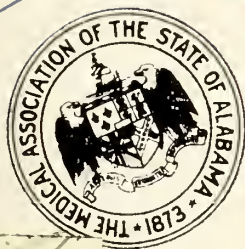
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JOURNAL

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IN THIS ISSUE

Knee Ligament Injury in Athletes 243

*Preventable and Avoidable Cancers and
Cancers Arising from Personal Indifference . . 252*

*Declaration of Helsinki
Important to Physicians 278*

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SEPTEMBER 1966

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(1) Portnoy, J.; Brewer, J. and Harris, A.: PUBLIC HEALTH REPORTS, 77:645-652, August 1962. (2) Joseph, J. M. and Warner, G. S.: A WORKSHOP MANUAL, Md. State Dept. Health, Bureau of Lab., Balto., Md., September 1962. (3) Wollenweber, H. L.: OFF. PATH., 2, February 5, 1963. (4) Portnoy, J.: MILIT. MED., 128:414-417, May 1963. (5) Portnoy J.: THE AMER. JOUR. OF CLIN. PATH., 40:473-479, November 1963. (6) Buck, A. A. and Mayer, H.: THE AMER. JOUR. OF HYG., 80:85-90, July 1964. (7) Brown, W. J.; Donohue, J. F. and Price, E. V.: PUBLIC HEALTH REPORTS, 79:496-500, June 1964. (8) Clayton, J. L.; Lindhardt, E. M. and Fraser, R. S.: PUBLIC HEALTH LAB 22:206-207, November 1964. (9) Lucatorto, F. M.; Katz, B. D. and Toto, P. D.: THE J.A.D.A., 69:697-699, December 1964. (10) Portnoy, J.: PUBLIC HEALTH LAB., 23:43, March 1965. (11) Reed, E. L.: PUBLIC HEALTH LAB., 23:96-103, May 1965.



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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 36 • September, 1966 • No. 3

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price \$5.00 Per Year

\$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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Managing Editor

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CONTENTS

President's Page	213
The Woman's Auxiliary	218
Editorial Comment	233
A Solution for the Doctor Shortage in Alabama?	233
Guest Editorial—Absolving Cain of the Murder of Abel	236
Excerpts from Dr. James G. Donald's President's Message	241
Scientific Section	243
Knee Ligament Injury in Athletes. Jack C. Hughston, M. D., Columbus, Georgia	243
Preventable and Avoidable Cancers and Cancers Arising from Personal Indifference. Wendell G. Scott, M. D., Saint Louis, Missouri	252
Salivary Gland Study Underway at the University of Alabama Medical Center. Gloria Goldstein	272
Legislature Praises Two Medical Leaders	277
Declaration of Helsinki Important to Physicians	278
The Physician and Traffic Safety. James C. Upchurch, M. D., Birmingham, Alabama	282
Around the State	288
County Society Meetings	288
Alabama Department of Public Health	290
Twenty Years of Hill-Burton Program	290
Radiation Control Board Assumes Duties	302
The Month in Washington	312
Third Quackery Congress Slated Oct. 7-8	320

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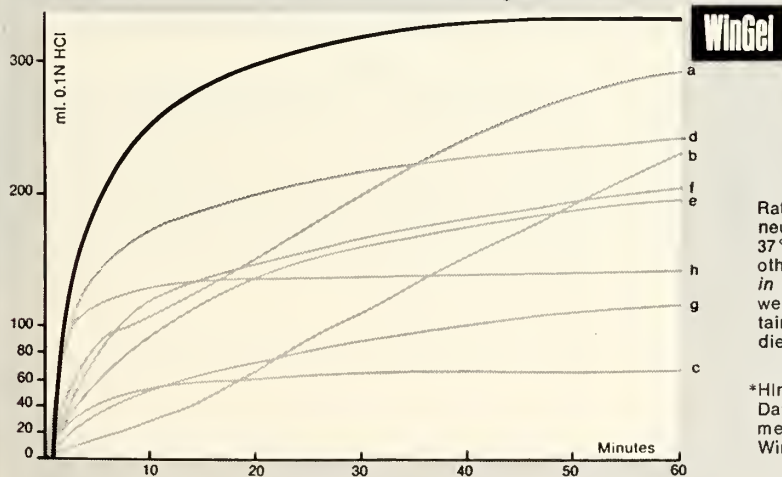
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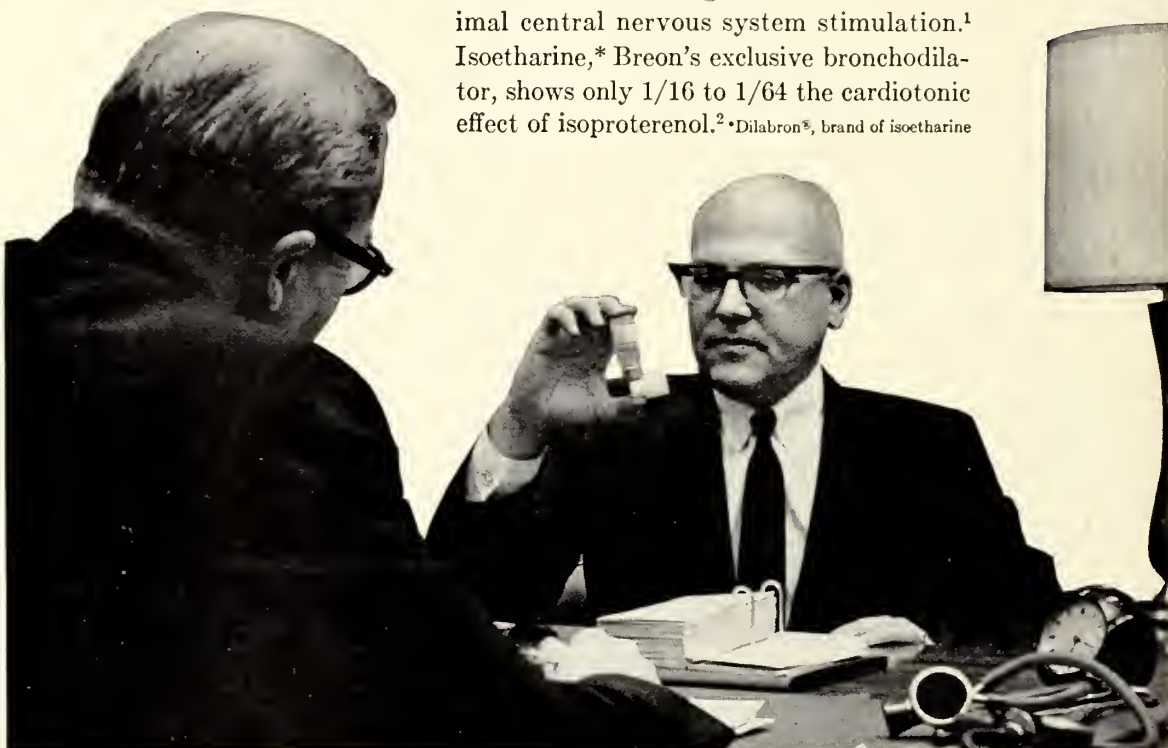
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References: 1. Spielman, A. D.: *Curr. Therap. Res.* 3:235 (June) 1961. 2. Herschfus, J. A.; Bresnick, E.; Levinson, L.; and Segal, M. S.: *Ann. Allergy* 9:769 (Nov.-Dec.) 1951.



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President's Page

ON THE PRESS CONFERENCE

August 2, 1966

On July 8, 1966, the Medical Association of the State of Alabama called a press conference on Medicare. This unprecedented affair took place at the Parliament House in Birmingham with our Assistant Executive Secretary, Mr. L. P. Patterson, responsible for all arrangements. Attendance from the various news media numbered 17, with representatives from the press, radio, and television.

The Association was represented by Dr. J. Garber Galbraith, long time Chairman of the Committee on Aging and Indigent; Dr. Paul Burleson, Chairman of the Board of Censors' ad hoc Committee on Blue Cross-Blue Shield Administrative Separation; Dr. John Chenault, one of our Delegates to the American Medical Association; Dr. Edmund A. Dowling, representing the Alabama Association of Pathologists; Dr. L. W. Funderberg, representing the Alabama Association of Anesthesiologists; The President of the Association and Mr. Patterson.

The subject was introduced by a presentation of our position by the President of the Association. After these preliminary remarks, questions by the various representatives were entertained. The most compelling evidence of interest was the duration of some one and one-half hours, instead of the anticipated 45 minutes to an hour. Without exception, the representatives were cordial and sincerity was indicated by the nature of their questions and discussions. There also appeared to prevail a sympathetic attitude toward physicians and the difficulties which they face. This attitude was further emphasized by the releases by the press, radio, and television.



Dr. J. O. Finney

The major item of interest, as judged by questions, was the matter of billing. The Vice Presidents of each of our four divisions undertook the difficult task of interviewing a representative segment of our members over the long Fourth of July week-end. Approximately two hundred fifty (250) physicians, or approximately ten per cent (10%) of our total membership, were interviewed and for this I wish to take this opportunity to personally thank each of the division Vice-Presidents for a job well done. The results of the poll indicated that the overwhelming majority of those physicians interrogated preferred the method of direct billing to the acceptance of an assignment. It was pointed out to the press, radio and television representatives that both the American Medical Association and the American Academy of General Practice had already publicly endorsed the method of direct billing and that the vast majority of our members belonged to one or both of these organizations. Another point stressed was that the members of our Association will continue to care for the elderly and patients of any age group with the same dedication as exhibited in the past.

The results of this conference with representatives of the news media in Alabama

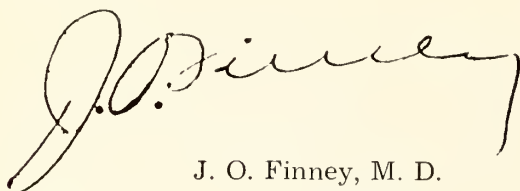
(Next Page)

PRESIDENT'S PAGE

should prove a valuable lesson to our Association; not a single derogatory editorial or letter followed. The free and easy dialogue which characterized the confrontation should encourage us to call another conference and present our side of the story when issues arise which may become distorted if we remain silent.

The Association owes much to Mr. L. P. Patterson for his expertise in the art of press relations and organizational knowledge in this area. We should consider ourselves fortunate, indeed, to have in our central office one with such a superior background in a facet of activity relatively new to us but growing in importance day by day.

If and when "Pat" calls on you for aid in any of the various programs he directs for us, be prepared to give him every assistance at your command.



J. O. Finney, M. D.
President

Emory University Has Inner Ear Bank Facility

ATLANTA, GA.—Emory University School of Medicine is the site of one of about 36 ear "banks" in the United States. The bank at Emory is the first in Georgia.

The "banks" are research laboratories where pathological studies of bequeathed inner ear structures are made. Information obtained in these studies is correlated with clinical data acquired during the donor's life.

The Deafness Research Foundation recently granted Dr. John H. Per-Lee, assistant professor in the school's Ear, Nose, and Throat Division, \$9,095 for operation of the Emory bank in 1966. Dr. John S. Turner, Jr. is director of the division and a co-investigator in the bone bank.

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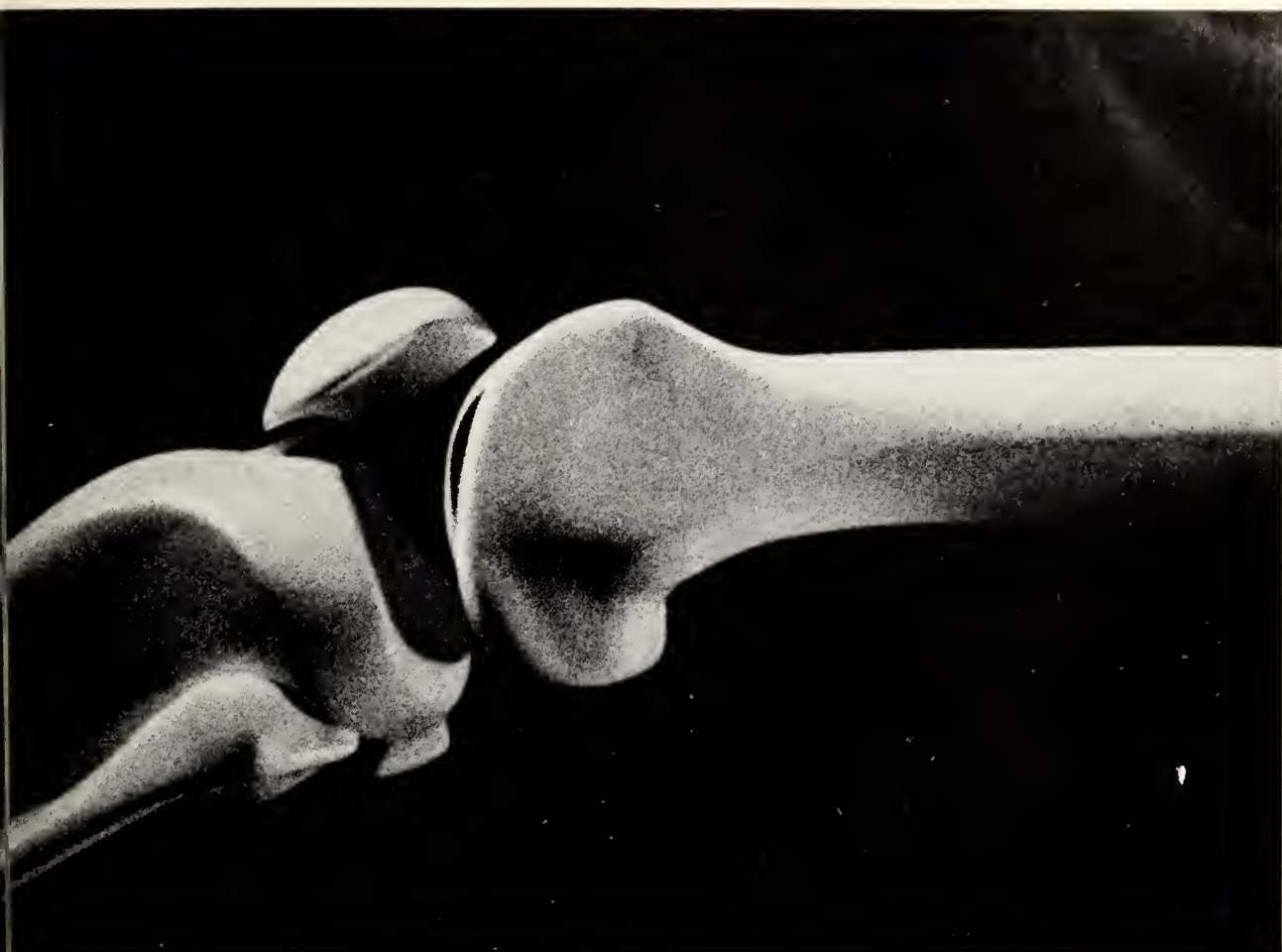


Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

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resolution of other signs of inflammation. And
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modic to minimize gastric upset.

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Butazolidin alka is contraindicated in
patients with danger of cardiac decompensation;
or symptoms of peptic ulcer; renal,
hepatic or cardiac damage; history of drug
allergy; history of blood dyscrasia. Because
of increased possibility of toxic reactions,
Butazolidin alka should be used with greater care in
the elderly and should not be given when the
patient is senile or when other potent chemo-
therapeutic agents are given concurrently.
The doses of Butazolidin alka are contra-
indicated in patients with glaucoma.

If coumarin-type anticoagulants are given
simultaneously, the physician should watch
for excessive increase in prothrombin time.

Pyrazole compounds may potentiate the phar-
macologic action of sulfonylurea, sulfonamide-
type agents and insulin. Patients receiving
such concomitant therapy should be carefully
observed for this effect.

Use with caution in the first trimester of preg-
nancy.

Precautions

Before prescribing, the physician should ob-
tain a detailed history and perform a com-
plete physical and laboratory examination,
including a blood count. The patient should
be kept under close supervision and should
be warned to report immediately fever, sore
throat, or mouth lesions (symptoms of blood
dyscrasia); sudden weight gain (water re-
tention); skin reactions; black or tarry stools.
Regular blood counts should be made to
guard against blood dyscrasias.

Adverse Reactions

The most common adverse reactions are nau-
sea, edema and drug rash. Moderately lowered
red cell count may sometimes occur due to he-
modilution. The drug has been associated with
peptic ulcer and may reactivate a latent peptic
ulcer. Infrequently, agranulocytosis, exfoliative
dermatitis, Stevens-Johnson syndrome or a
generalized allergic reaction may occur and
require withdrawal of medication. Stomatitis,
salivary gland enlargement, vertigo or languor
may occur. Leukemia and leukemoid reactions
have been reported but cannot definitely be

attributed to the drug. Thrombocytopenic
purpura and aplastic anemia are also possible
side effects.

Confusional states, hyperglycemia, agitation,
headache, blurred vision, optic neuritis and
transient hearing loss have been reported, as
have hepatitis, jaundice and several cases of
anuria and hematuria. With long-term use,
reversible thyroid hyperplasia may occur
infrequently.

Dosage

The initial daily dosage in adults is 300-600
mg. daily in divided doses. In most instances,
400 mg. daily is sufficient. When improvement
occurs, dosage should be decreased to the
minimum effective level; this should not
exceed 400 mg. daily, and is often achieved
with only 100-200 mg. daily.

For complete details, please refer to full
prescribing information.
6509-V(B)

Also available: Butazolidin®, phenylbutazone
Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York BU-3804R

Geigy



*you can hang on for a few minutes, Doctor,
I'm sure I'll start coughing again.*

Patients don't realize there's more to a cough than meets the ear. The useless, exhausting type of cough that often accompanies respiratory infection or allergy, you can provide prompt relief with Novahistine DH. Its decongestant-antitussive controls frequency and intensity of cough spasms without abolishing cough reflex. The fresh, grape flavor of Novahistine DH appeals to children and adults alike. When your diagnosis is bronchitis, complicated by thick tenacious exudates, Novahistine Expectorant is particularly useful. It not only provides decongestive action and controls cough, but also encourages expectoration, thus easing bronchial constriction and mucous production.

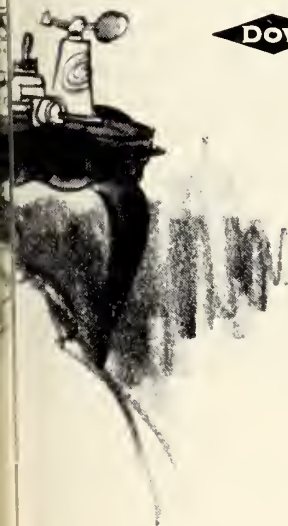
Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism, or urinary retention. Ambulatory patients should be advised that drowsiness may result. Continuous dosage over an extended period is contraindicated since codeine phosphate may cause addiction.

Each 5 ml. teaspoonful of Novahistine DH contains codeine phosphate, 10 mg. (Warning: May be habit forming); phenylephrine hydrochloride, 10 mg.; chlorpheniramine maleate, 2 mg.; chloroform (approx.), 13.5 mg.; l-menthol, 1 mg. (Alcohol 5%). Each 5 ml. of Novahistine Expectorant contains the above ingredients and, in addition, glyceryl guaiacolate, 10 mg.

NOVAHISTINE[®] DH **NOVAHISTINE[®] EXPECTORANT**



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis



The Woman's Auxiliary

Mrs. Asher Yaguda, our new national president, at the National Convention this year gave some words of wisdom to the leaders in Auxiliary work from 50 states. It's a time for rededication and reevaluation of our goals. We face disturbing aspects. At this time we are in a vulnerable position, and our responsibility is to mold positive public opinions. Co-operate with other organizations. It is a time to escalate our leadership qualities. Philanthropy is on the defensive today as it has become the property of Government. WELFARE is BIG BUSINESS. Altruism has become old fashioned. Nationally our auxiliaries gave \$345,573.81 to AMA-ERF, and all together previously an amount totaling two million dollars. We are competing with government on this basis. We need a dedicated unfettered profession, filled with people who feel LEADERSHIP is not an obligation but a luxury. Health problems have been delved into deeply, and our action here is planned, utilizing effective action—a thing of the head as well as of the heart. Then she quoted Mrs. W. G. Thuss, Sr. "Our role is part of a restless world. In a changing medical world it's time to remember our heritage as we move with our future."

For our year's program we have been asked that we simplify, and focus the program content on specific, timely health problems. The advantage would be working toward common goals which have been explored and shown to be needed. Youth may appear to be more demanding because ours is a youth-focused nation. The unvoiced needs of our eighteen million older citizens have brought a new dimension to medical practice. Their needs and their numbers require that we, who support our physician husbands by serving our communities, assist in providing the services needed for the elders total care. Our auxiliary is to become the catalyst—the group which brings to your community that much needed homemaker service, meals on wheels, or volunteer friend-



These delegates attended the recent National Auxiliary Convention: (left to right) Mrs. H. C. Johnson, Sheffield; Mrs. W. G. Thuss, Sr., Birmingham, Chairman of the Alabama delegation; Mrs. Ira Patton, Oneonta, President of WAMASA; and Mrs. R. K. Wilson, Aliceville. Mrs. James C. Guin, President-Elect of WAMASA also was present.

ly visitor agency. Our other projects for special attention will be Health Education and Direct Service Projects.

From the different State Reports, I brought back some of the most outstanding slogans, so that we may adapt them to our use.

Florida, giving an off-beat fashion show, Defeat "Strip Tease" give away programs. A good theme they used: Progress through Partnership.

One state said, "Show three faces. Facing up, outward, forward."

Medicare, Fedicare,
If you don't care,
There may be No Care.

Mississippi, "Don't be caught dead, sitting on your seatbelt."

North Carolina used "Keys to Becoming a Successful Doctors Wife."

K—Knowledge, Seek education and information

E—energy, Keep physically fit

Y—yield, Yield right of way to the doctor

S—service

This past year North Carolina had Dr. Paul Dudley White as a guest, his statement to the

(Continued on Page 228)



UP TO 10-12 HOURS' CLEAR BREATHING ON ONE TABLET

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

sinusitis, colds, or U.R.I., Dimetapp lets congested patients breathe easy again. Each Extentab brings welcome relief all day or all night, usually without drowsiness or overstimulation. Its key to success? The Dimetapp formula — Dimetane (brompheniramine maleate), a potent antihistamine reported in one study to have excited side effects as few as the placebo,* teamed with decongestants phenylephrine and phenylpropanolamine — a dependable 10- to 12-hour form.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on

rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

Dosage: 1 Extentab morning and evening, or as needed.

Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for conventional *t.i.d.* or *q.i.d.* dosage. See package insert for further details.

A. H. ROBINS CO., INC.
RICHMOND, VIRGINIA 23220

A-H-ROBINS

*Silller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

The full 1/4 grain of phenobarb in the formula

**takes the nervous edge off the pain
...helps bring out the best in codeine**



Phenaphen[®] with Codeine

the only leading compound
analgesic that **calms**
instead of caffeinates

Each capsule contains:

Phenobarbital (1/4 gr.) 16.2 mg.

(Warning: may be habit forming)

Aspirin (2 1/2 gr.) 162.0 mg.

Phenacetin (3 gr.) 194.0 mg.

Hyoscyamine sulfate 0.031 mg.

Codeine phosphate 1/4 gr. (No. 2),

1/2 gr. (No. 3), 1 gr. (No. 4)

(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.

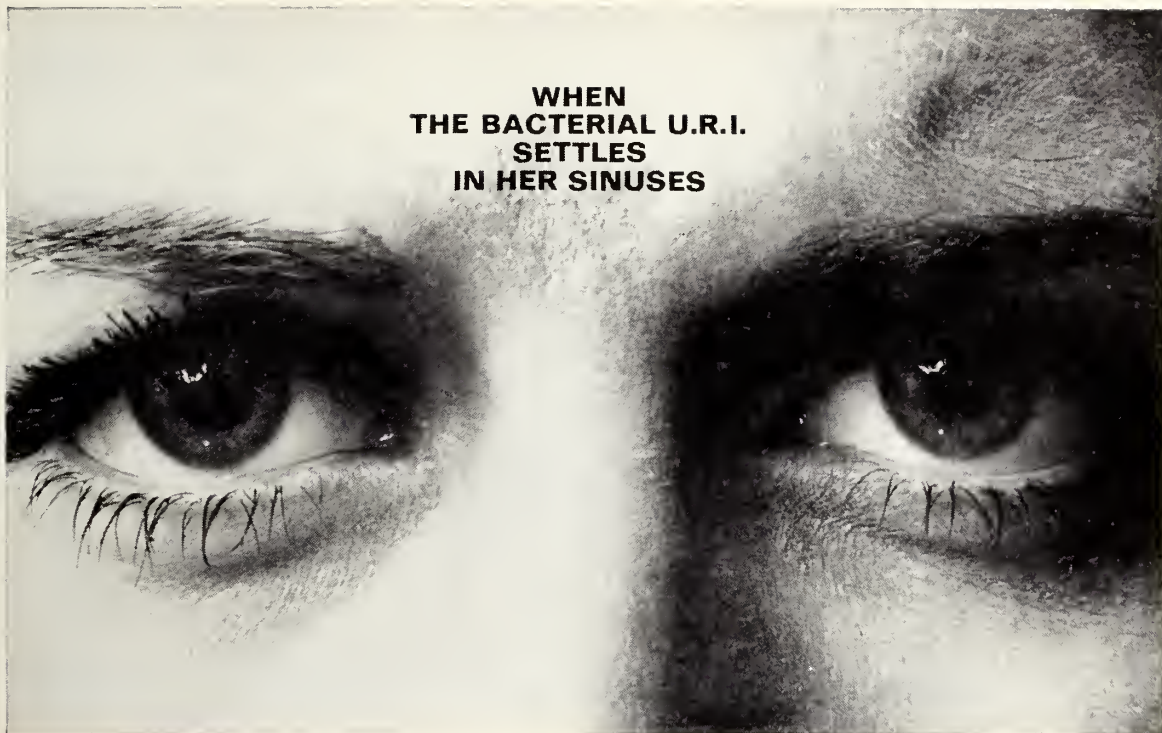
Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon — nausea, constipation and drowsiness have been reported.

A·H·ROBINSON

A. H. ROBINSON CO., INC., Richmond, Va. 23220

WHEN
THE BACTERIAL U.R.I.
SETTLES
IN HER SINUSES



ACHROCIDIN®

Tetracycline HCl-Antihistamine-Analgesic Compound

Each tablet contains:

ACHROMYCIN® Tetracycline HCl 125 mg
Phenacetin 120 mg

Caffeine 30 mg
Salicylamide 150 mg
Chlorothen Citrate 25 mg

The patient can feel better while getting better. ACHROCIDIN brings the treatment together in a single prescription—prompt symptomatic relief together with early, potent control of the tetracycline-sensitive organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

Effective in controlling complicating tetracycline-sensitive bacterial infection and providing symptomatic relief in allergic diseases of the upper respiratory tract.

Contraindication—History of hypersensitivity to tetracycline.

Warning—If renal impairment exists, even usual doses may lead to liver toxicity. Under such conditions, lower than usual doses are indicated and if therapy is prolonged, tetracycline serum level determination may be advisable. Hypersensitive individuals may develop a photodynamic reaction to natural or artificial sunlight during use. Individuals with a history of photosensitivity reactions should avoid direct exposure while under treatment and treatment should be discontinued at first evidence of skin discomfort.

Precautions—Some individuals may experience drowsiness, ano-

rexia, and slight gastric distress. If excessive drowsiness occurs, it may be necessary to increase the interval between doses. Persons on full dosage should not operate any vehicle. Use may result in overgrowth of nonsusceptible organisms. If infections appear during therapy, appropriate measures should be taken. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Infections caused by beta-hemolytic streptococci should be treated for at least 10 full days to help prevent rheumatic fever or acute glomerulonephritis. Use of tetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect has been observed in usual short treatment courses.

Average adult dosage: 2 tablets four times daily, given at least one hour before, or two hours after meals.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

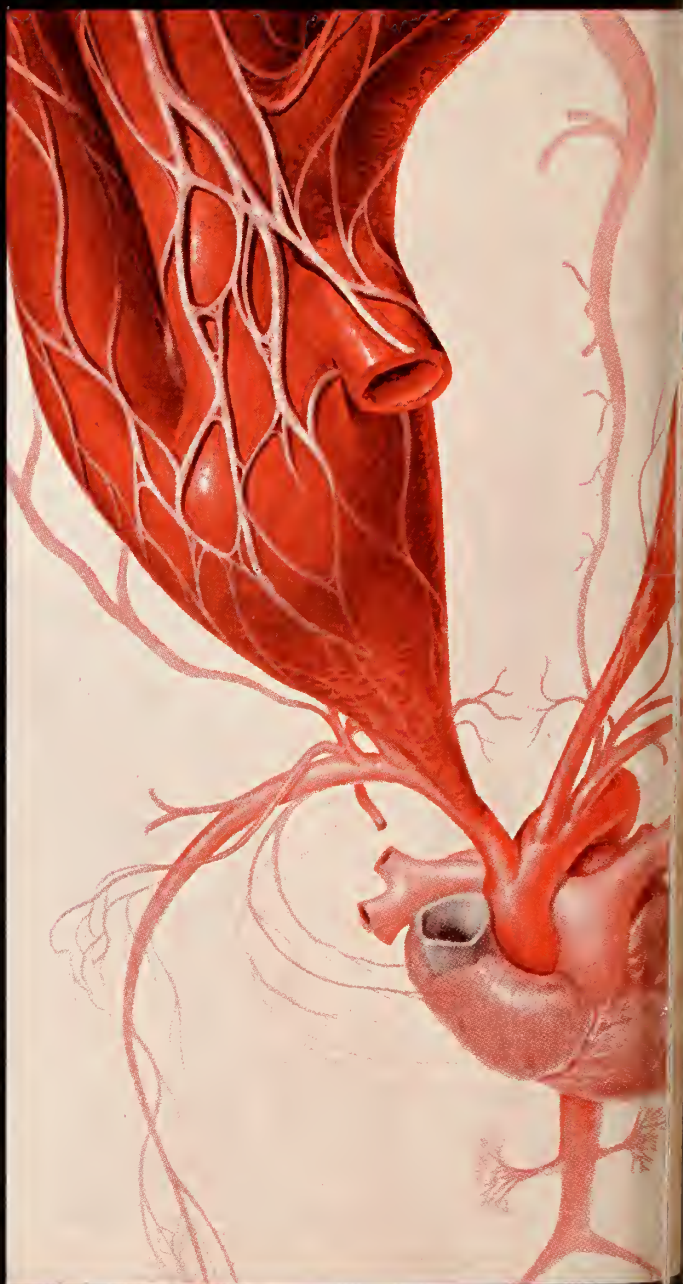


608 6 3393

*A Key Site of Action of the
Protoveratrine A in Salutensin*

"The main function of the
carotid sinus is regulation of
the blood pressure...."¹

The veratrum component of
Salutensin acts here (and in the
myocardium), initiating
"...a reflex fall in blood pressure
through a generalized vaso-
dilation and fall in heart rate."²



This is a logical Blood Pressure Regulator

**BECAUSE
IT ENHANCES
THE BODY'S OWN
MECHANISMS
FOR REDUCING
BLOOD PRESSURE**

**In mild
to moderate hypertension:**

Salutensin enhances the body's own mechanisms for lowering blood pressure. The veratrum component of Salutensin acts on the carotid sinus and myocardial receptors, initiating "...a reflex fall in blood pressure through a generalized vasodilation and fall in heart rate."²

To achieve this reflex modification of hypertension, Salutensin utilizes protoveratrine A.

In addition, to facilitate and maintain blood pressure reduction, Salutensin incorporates reserpine and a highly effective thiazide.

In general, side effects have been

reported infrequently but may include those listed in the therapeutic summary.

Simple dosage—low-cost therapy: Many patients on Salutensin respond to 1 tablet *b.i.d.* Long-term economy is assured, since dosage can frequently be lowered after initial control is established.

Available: Prescription-size bottles of 60 tablets.

References: 1. Editorial: *JAMA* 191:592 (Feb. 15) 1965. 2. Meilman, E., in Moyer, J.H.: *Hypertension*, Philadelphia, W.B. Saunders Company, 1959, p. 395.

BRISTOL THERAPEUTIC SUMMARY
For complete information consult Official Package Circular.

Indications: Essential hypertension.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

Contraindications: Salutensin is contraindicated in severe depression.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss, which may cause digitalis intoxication, responds to potassium-rich foods, potassium chloride or, if necessary, stopping therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy two weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution with patients with peptic ulcers or renal insufficiency (if severe, Salutensin is contraindicated).

Side Effects: *Hydroflumethiazide:* Purpura plus or minus thrombocytopenia, hyperuricemia, leukopenia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet *b.i.d.*

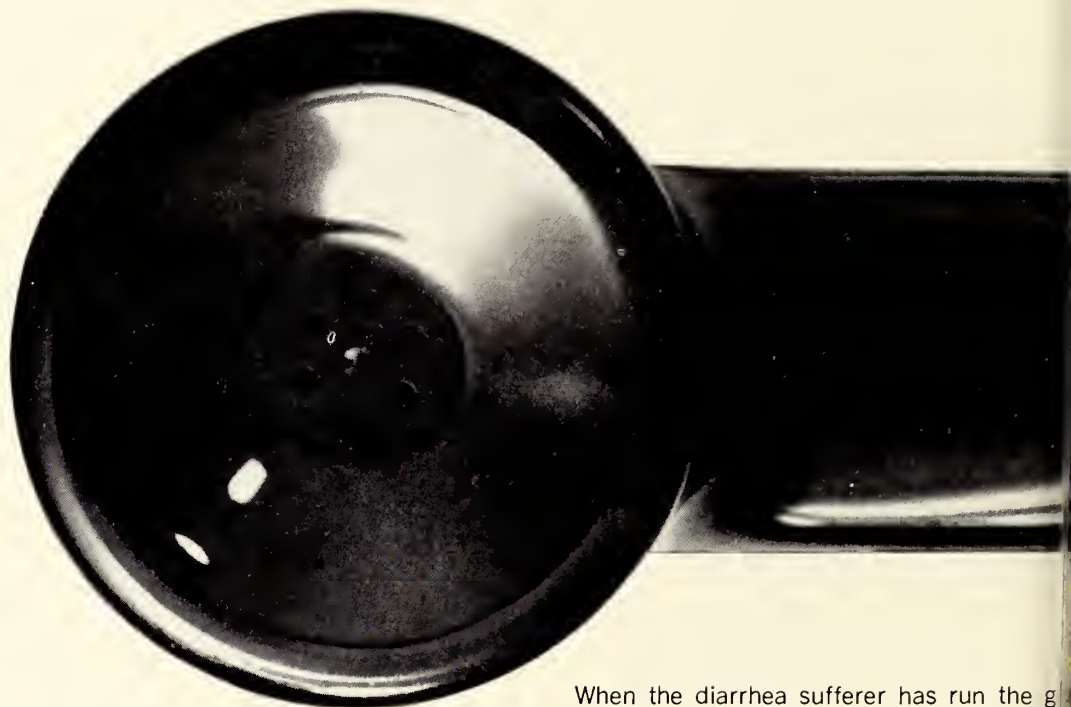
BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Co.
Syracuse, New York

Salutensin[®]

Each tablet contains:
protoveratrine A, 0.2 mg.;
hydroflumethiazide, 50 mg.;
reserpine, 0.125 mg.

When uncontrolled diarrhea brings a call for help



When the diarrhea sufferer has run the gamut of home remedies without success, pleasant relief with CREMOMYCIN can answer the call for help. It is counted on to consolidate fluid stools, soothe intestinal inflammation, inhibit enteric pathogens, detoxify putrefactive materials — usually within a few hours.

CREMOMYCIN combines the bacteriostatic succinylsulfathiazole and neomycin, with a sorbent and protective demulcents, kaolin and pectin, for comprehensive control of diarrhea.

INDICATIONS: Diarrhea.

CONTRAINDICATIONS: Do not use in intestinal obstructive ulceration of bowel, or diverticulosis; in hypersensitivity to sulfonamides or neomycin; in pregnancy at term, in infants, or during first week of life in the newborn.

WARNINGS: Use only after critical appraisal in patients with hepatic or renal damage, urinary obstruction, or blood dyscrasias. Fatal hypersensitivity reactions and blood dyscrasias reported with use of sulfonamides. Consider periodic blood and renal function tests during intermittent use.

PRECAUTIONS: *Succinylsulfathiazole:* Use with caution in patients with history of significant allergies and/or asthma. Consider supplementary vitamins B₁ and K. *Neomycin:* requires supplementary vitamins B₁ and K.

your Rx for
Cremomycin
can provide relief



neuromuscular block during anesthesia if neomycin is administered preoperatively in large doses when renal function is impaired. Watch for overgrowth of nonsusceptible organisms. Concomitant use of ototoxicity and nephrotoxicity with prolonged use.

EFFECTS: As with all sulfonamides: Headache, malaise, anorexia, symptoms, hepatitis, pancreatitis, blood dyscrasias, fever, drug fever, rash, conjunctival and scleral injection, purpura, hematuria, and crystalluria have been noted. Decreased output of thiamine and decreased synthesis of protein have been reported. Neomycin: Nausea, loose stools.

When prescribing or administering, read package circular with instructions available on request.

promptly relieves diarrheal distress

cremomycin®
DIARRHEAL

Each 30 cc. contains neomycin sulfate 300 mg. (equivalent to 210 mg. of neomycin base), succinylsulfathiazole 100 mg., colloidal kaolin 3.0 Gm., pectin 0.27 Gm.

W. L. SHARP & DOHME Division of Merck & Co., Inc., West Point, Pa.

Today's theory is tomorrow's therapy

Norinyl[®] tablets

(norethindrone 2 mg. ♂ mestranol ♀ 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

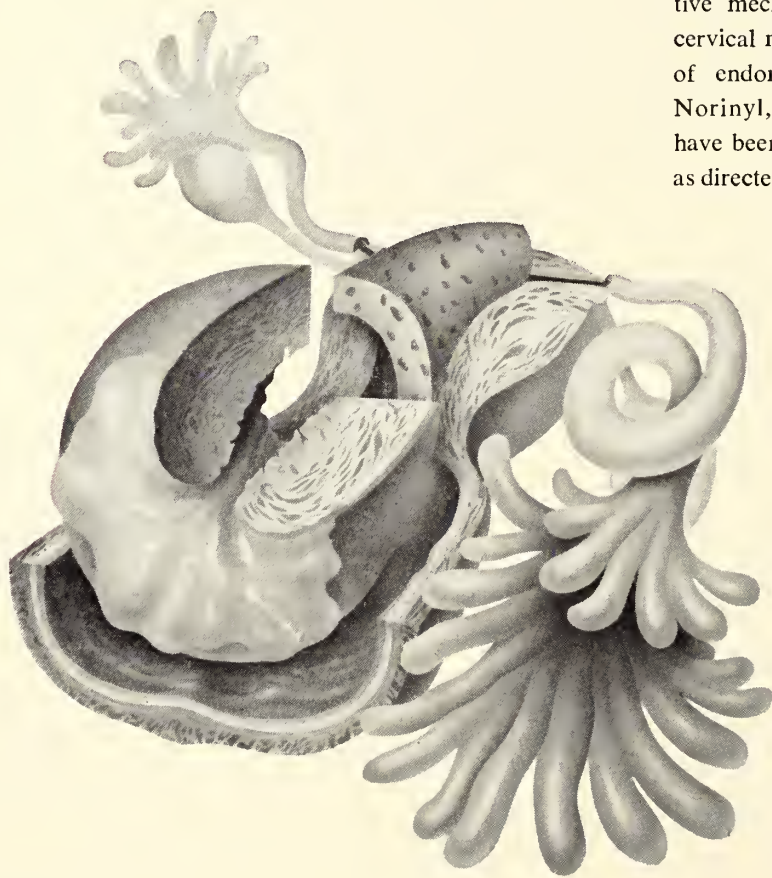
**inhibition of ovulation by means of
2 time-proved hormonal agents**

**production of a cervical mucus hostile to
sperm motility and vitality**

**creation of an endometrium unreceptive
to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

Low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb 29) 1964. 2. Bryans, F. E.: Canad. Med. Ass. J. 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med. Clin. N. Amer. 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med. Sci. 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice Wray, E.: Goldzieher, J. W., and Aranda-Rosell, A.: Fertil. Steril. 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kemper, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil. Steril. 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N. Carolina Med. J. 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl. Ther. 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl. Ther. 6:427 (May) 1964. 16. Newland, O. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med. Sci. 16:26 (Nov.) 1965.

norethindrone—an original steroid from
SYNTEX
LABORATORIES INC. PALO ALTO, CALIF.

Norinyl tablets
(norethindrone 2 mg. c. mestranol 0.1 mg.)

for multiple contraceptive action

WOMAN'S AUXILIARY
(Continued from Page 218)

group was, "Americans are eating and riding themselves to death."

Oklahoma; "Problem Oriented in place of Committee Oriented."

South Carolina; "Give up to give."

Ohio: "If it is to be, it is up to me."

"Never underestimate the power of a woman" describes the answer of auxiliary members to solving national and community health problems. It would be impossible to list, even by category, the many ways county auxiliaries serve their communities. Each project represents a problem oriented approach and thoughtful solution to a demonstrated community health need, and reflects the community service concept of education on individual and community health responsibilities. These meaningful words were given by Mrs. Howard G. Ellis, National Community Service Chairman.

"To work is to triumph. Triumph is just a little "UMPH" added to "TRY".

Our Fall Workshop meets in Montgomery, Midtown Holiday Inn, September 21, 22, 1966. Every member please attend. We have good speakers, latest films from A. M. A., latest program plans.

Mrs. Ira B. Patton

Mrs. Ira B. Patton

President WAMASA

X-Ray May Be Harmful

Children treated with X-ray for ringworm of the scalp may suffer severe radiation injury, warns a New York University Medical Center team headed by Dr. Roy E. Albert. In a follow-up survey of 1,908 patients who received X-ray treatment and 1,801 who did not, they found a greater incidence of cancer, mental disease, and permanent hair damage (baldness and graying) in the irradiated group.—*Med. World News*, Dec. 10, p. 80.

**Lessens motility,
reduces secretions and
maintains mild sedation
in the ulcer patient**



ANTROCOL[®]

**ANTISPASMODIC
ANTISECRETORY
SEDATIVE**

Each tablet or capsule contains Atropine sulfate 0.324 mg. Phenobarbital 16 mg. Warning, may be habit forming. *Benzulfoid 65 mg. *See White Sec. P.D.R. p. 851.

INDICATIONS: Peptic ulcer. Functional digestive disturbances.

DOSAGE: In peptic ulcer 4 to 8 tablets or capsules per day. Dryness of mouth is a guide to proper dosage in acute ulcer. As the ulcer heals, increased sedation is an indicator to reduce dosage. In functional digestive disturbances, 1 tablet or capsule every six hours maintains sedation at the threshold of calmness. The mild antisecretory action does not disturb the average patient.

SIDE-EFFECTS: Dryness of mouth, blurred vision and difficult urination.

PRECAUTIONS: Use cautiously in prostatic hypertrophy. Do not use in glaucoma.

Tablets packaged in bottles of
100, 500 and 5000

Capsules packaged in bottles of
100, 500 and 1000

WM. P. PYTHRESS & CO., INC.

RICHMOND, VIRGINIA

Manufacturers of ethical pharmaceuticals since 1856

anatomy of
Low Back Pain #1



**the sedentary life
is often the seat of
low back pain**

The human spine is not engineered for prolonged sitting at desks, pianos, typewriters and drafting boards. The stresses set up by the heavy, forward-tilted head and trunk, balanced precariously on an insufficient base, result in strain of the dorsal musculature, particularly at the low lumbar level.

The unusual muscle-relaxant and analgesic properties of 'Soma' make it especially useful in the treatment of low back sprains and strains. 'Soma' is widely prescribed ☐ to relieve pain ☐ to relax muscles ☐ to restore mobility.

Indications: 'Soma' is useful for management of muscle spasm, pain, and stiffness in a variety of inflammatory, traumatic, and degenerative musculoskeletal conditions. It also may act to normalize motor activity in certain neurologic disturbances.

Contraindications: Allergic or idiosyncratic reactions to carisoprodol.

Precautions: 'Soma', like other central nervous system depressants, should be used with caution in patients with known propensity for taking excessive quantities of drugs and in patients with known sensitivity to compounds of similar chemical structure, e.g., meprobamate.

Side Effects: The only side effect reported with any frequency is sleepiness, usually on higher than recommended doses. An occasional patient may not tolerate carisoprodol because of an individual reaction, such as a sensation of weakness. Other rarely observed reactions have included dizziness, ataxia, tremor, agitation, irritability, headache, increase in eosinophil count, flushing of face, and gastrointestinal symptoms.

One instance each of pancytopenia and leukopenia, occurring when carisoprodol was administered with other drugs, has been reported, as has an instance of fixed drug eruption with carisoprodol and subsequent cross reaction to meprobamate. Rare allergic reactions, usually mild, have included one case each of anaphylactoid reaction with mild shock and angioneurotic edema with respiratory difficulty, both reversed with appropriate therapy. In cases of allergic or hypersensitivity reactions, carisoprodol should be discontinued and appropriate therapy initiated. Suicidal attempts may produce coma and/or mild shock and respiratory depression.

Dosage: Usual adult dose is one 350 mg. tablet three times daily and at bedtime.

Supplied: Two Strengths: 350 mg. white tablets and 250 mg. orange, two-piece capsules.

Before prescribing, consult package circular.

**for the relief
of low back
sprains and strains**

SOMA[®]
(CARISOPRODOL)



Wallace Laboratories, Cranbury, N.J.
26501J

**When
thiazide
or
reserpine
alone
won't
keep**

**BLOOD
PRESSURE
STAYS
DOWN**

Establish and maintain early, more decisive control of blood pressure

DIUTENSEN-R[®]

Cryptenamine 1.0 mg.* Methyclothiazide 2.5 mg. Reserpine 0.1 mg.

When blood pressure won't stay down despite initial therapy — when complaints of headache, fatigue or dizziness are often voiced — it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine *plus* cryptenamine — a rational, comprehensive therapy to help establish and maintain early, more decisive control of blood pressure.

The cryptenamine in DIUTENSEN-R helps improve normal vasodilating reflexes while the thiazide and reserpine components maintain vasorelaxant, sedative, and saluretic benefits. Cryptenamine lowers pressoreceptor reflex thresholds (which may be abnormally high in hypertension) — “resets” pressoreceptors to function at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

“...quite apart from the problem of vascular damage, there arises a possibility of virtual ‘cure’ or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive.”

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice* 1966-67, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals.

However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars. **Side effects and precautions:** The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout symptoms and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon. DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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Breast-feeding and the “modern mother”

Despite a mild resurgence of interest in the importance of breast-feeding a few years ago, many women today do not choose to nurse their young. This is for a variety of reasons—social, economic, cultural and sometimes medical. In such cases the physician's task is to find the most suitable means of preventing lactation and easing the pain of breast engorgement.

The means of therapy

The value of hormone therapy for this indication is of course well established. Both androgen and estrogen are known to inhibit the production and secretion of the lactogenic hormone by the anterior pituitary. As estrogen levels decline sharply at parturition, lactogenesis is established. When androgen and estrogen are administered to the patient before the release of the lactogenic hormone lactation and breast engorgement are usually prevented.

The time of therapy

The time of administration of this combined medication is crucial; it must be given early enough to suppress the pituitary prolactin and last long enough to permit physiologic readjustment during the puerperium. Excellent results are most often seen when therapy is administered before the onset of the second stage of labor.

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CTOR SHORTAGE IN ALABAMA?

boards approved by the American Medical Association;

(6) Has been certified by the Educational Council for Foreign Medical Graduates.

While there doubtless are many physicians in Alabama and elsewhere who prefer that the status quo in the matter of licensing be maintained, those who have been entrusted with Medicine's leadership have long realized that immediate and effective actions must be taken to relieve the doctor shortage in scores of rural communities.

The Physician Placement Service of MASA, at last report, has requests from 92 Alabama localities in dire need of one or more doctors. In countless others the small corps of practicing physicians are severely overworked with their regular patient loads,



An eminent role in medical practice

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- The high safety-efficacy ratio of 'Miltown' has been demonstrated by more than a decade of clinical use.

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Indications: Meprobamate is effective in relief of anxiety and tension states. Also as adjunctive therapy when anxiety may be a causative or otherwise disturbing factor. Although not a hypnotic, meprobamate fosters normal sleep through both its anti-anxiety and muscle-relaxant properties.

Contraindications: Previous allergic or idiosyncratic reactions to meprobamate or meprobamate-containing drugs.

Precautions: Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses.

Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Usual adult dosage: One or two 400 mg. tablets three times daily. Doses above 2400 mg. daily are not recommended.

Supplied: 'Miltown' (meprobamate) is available in two strengths: 400 mg. scored tablets and 200 mg. coated tablets. 'Mepro-tabs' (meprobamate) is available as 400 mg. white, coated, unmarked tablets. *Before prescribing, consult package circular.*

WALLACE LABORATORIES
Cranbury, N.J.

(Continued from Page 233)

vide some relief. One was a scholarship law designed to attract into the Medical College of Alabama students who have roots in this State and will remain here to practice after their education is completed. The second was a \$10 million bond issue for the Medical College to enable it to expand its facilities from 80 students per year to 100.

Both of these proposals were enacted into law, but obviously it will be several years before either will bear fruit. Buildings must be constructed and equipped, students must be educated and complete their internships and residencies before they become available as practitioners.

Meanwhile, the demand for doctors is **NOW**, and unless the medical profession cooperates to the fullest with all existing agencies to solve the problem we can be certain that other powerful interests will do it for us.

When legislative rumblings first were heard that a bill was being prepared for the Special Session of the Legislature which would admit a non-citizen physician to practice in this State by whatever means were necessary, the Board of Medical Examiners began a series of studies of alternative methods which would accomplish the same purpose without lowering medical practice requirements or standards.

From stalwart friends of Medicine in both the U. S. Congress and the Alabama Legislature came disturbing observations that the doctor shortage—aggravated by passage of the Medicare Law—is a most pressing problem in every State of the nation, and that first steps taken toward a solution cannot long be delayed.

From Washington came information that a two-year backlog of bills for U. S. citizenship through direct legislation in individual cases virtually precludes this route for licens-

ing foreign-born physicians in Alabama who otherwise meet all criteria.

From equally faithful friends in the Alabama Legislature—many from communities which themselves need additional medical service—came gentle suggestions that they would be hard-pressed to oppose legislation which could provide relief to their own constituents.

The compromise, which the Board achieved with the sponsor of the citizenship bill, was drafted after long and diligent analysis of all facts. It does not diminish medical practice standards in Alabama one iota; it proves that this Association, and its leadership, are as concerned as anyone else over the increasing demands for medical service in our less-populated areas, and are willing to exert every effort to solve a problem growing more acute every year.



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ABSOLVING CAIN OF THE MURDER OF ABEL

By Morrie Ryskind

The Supreme Court, usually content with making history, completely rewrote it when it reversed a lower court sentence imposed some 5,700 years ago. By a 5-to-4 decision, it absolved Cain of the murder of Abel.

At the same time, the court made it clear that it stood by its recent dictum that the new strict rules on police questioning of suspects were not to be applied retroactively. "The exception was made," said Justice Warren, "in the interest of the greater good. We wanted to correct once and for all the judicial errors in the case of the People vs. Cain, which set a false precedent for 5,700 years and has resulted in so many miscarriages of justice."

Here, in lay language, are the highlights of the majority opinion, which was written by the chief justice:

The so-called confession (Genesis, Chapter 4) was obtained by an Officer who failed to tell Cain he need not testify against himself and that he had a right to have an attorney present during the questioning. The mere fact that there were no lawyers in existence at the time in no way abrogated the constitutional rights of the suspect to be represented by counsel.

By the Officer's own report, the defendant, when first questioned, said straight-forwardly he did not know where Abel was and could hardly be expected to, not being his brother's keeper. It was only after custodial interrogation, during which Cain was virtually incommunicado, that he broke down and "confessed."

During that period, the Officer asserted He heard Abel's blood crying from the ground, a patently false statement designed to terrorize the defendant. Any confession obtained under duress by the use of such nefari-

ous "third-degree" techniques can have no standing before the bar of justice.

There is prima-facie evidence, too, that the police brutality was not only psychological but shockingly physical. Before the interrogation, the suspect was unscarred; after it, he bore the so-called mark of Cain, a memento of his savage ordeal that remained with him the rest of his life.

Further proof, if any were needed, of the Star Chamber quality of the proceedings, lies in the undisputed fact that the Officer acted not only as prosecutor, but as judge and jury, too. "The whole case smacks of blatant McCarthyism," the report concludes, "and the judgment of the lower court is hereby reversed."

It is a little too early, perhaps, to predict all the consequences of this landmark decision. But, sparing no expense, your reporter immediately got into telephonic communication with the parties most vitally concerned.

Located in the Land of Nod, somewhere East of Eden, Lamech Cain, a direct descendant of the accused, said: "It is a wonderful thing to have great-great-great-great-grandpappy's name cleared after all these years. We always knew he was innocent, and the family never gave up hope. Our deep thanks to the many people and organizations, especially the Nod Civil Liberties Union, the Friends of Lady Macbeth and the local chapter of the DuBois Clubs who contributed so much of their time and money to get the issue before the Warren Court."

Thus a spokesman for the Gideon Society: "No matter what our individual opinions may be, our directors plan to abide by the court's ruling. All our Bibles will be withdrawn from hotel rooms at once, and a revised 4th

(Continued on Page 240)

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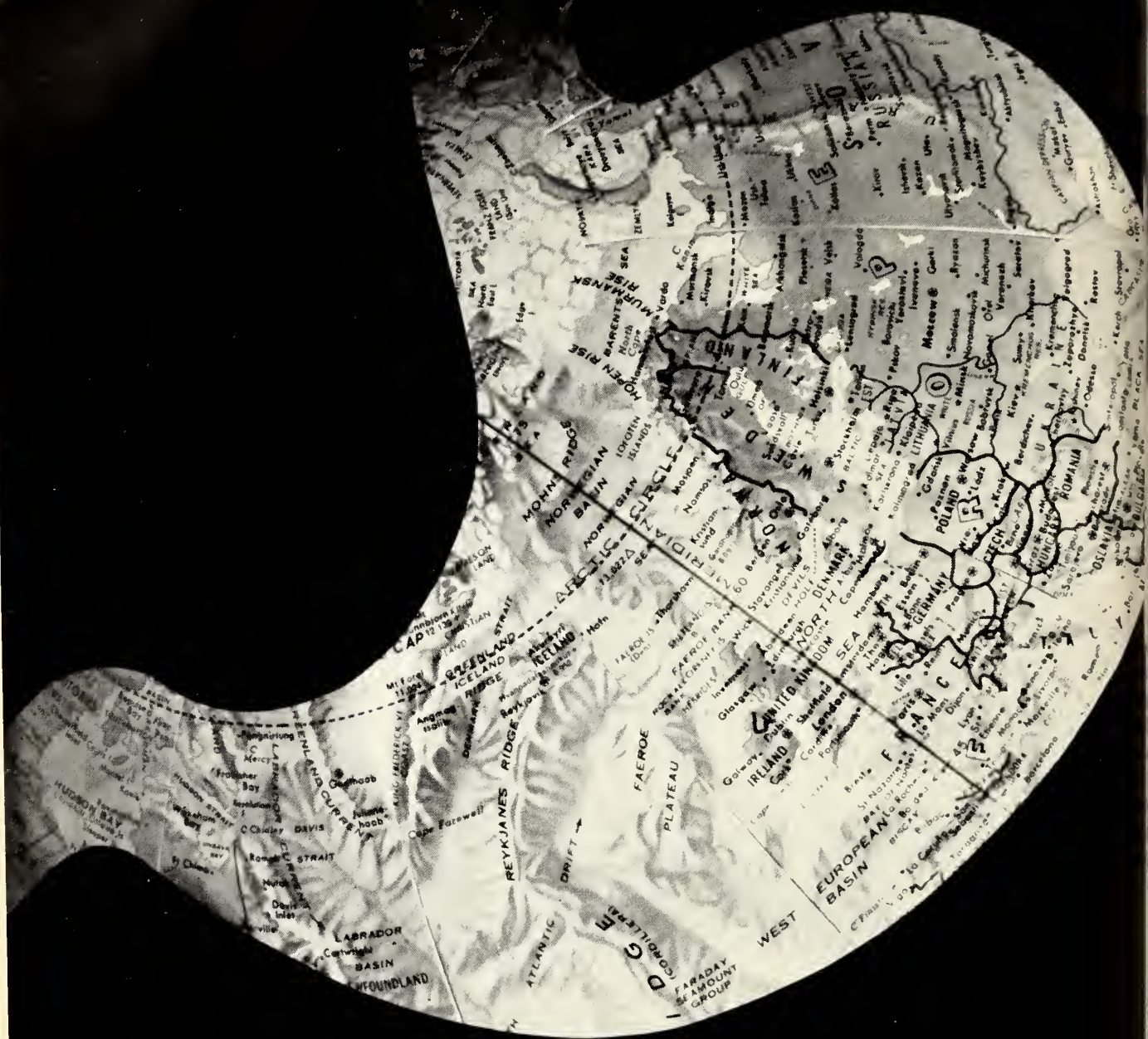
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The “Socio- geographic” mystery

Why is one man's gastric ulcer another man's duodenal?



Geographic variation in the *incidence* of peptic ulcer is a familiar fact. But the proclivity of certain *kinds* of ulcer for certain geographic areas is a recently recognized phenomenon.^{1,2}

For example, in one particular Norwegian fishing village there is a tendency for patients to develop a gastric ulcer; anywhere else in Norway, ulcers are usually duodenal. Peruvians high in the Andes have more gastric ulcers than their compatriots in the lowlands. Why? Nobody knows.

Social variations, too. Even in the same geographic areas there are interesting variations. An Englishman's ulcer depends on his social standing—professional men suffer with duodenal ulcers, while workingmen have more of the gastric variety. In southern India the pattern is reversed. Here, duodenal ulcers are common among laborers and agricultural workers and rare among the upper classes.

Investigators are exploring every possible theoretical avenue in their search for the cause of peptic ulcer. Of all the factors implicated in ulcerogenesis, the one that is generally acknowledged to be of primary importance is hypersecretion of gastric acid.³⁻⁸ Or, as one author states it: "The medical management of peptic ulcer pharmacologically is, in the final analysis, concerned largely with the effective inhibition of peptic activity."³

Robinul (glycopyrrolate) provides potent, rapid, specific antisecretory action as confirmed by gastric analyses and x-ray evidence of clinical effectiveness.^{3,7,9-12} It relieves pain with "impressive" promptness.⁸ Quickly alleviates acute discomfort, effectively counteracts gnawing pain, preprandial midepigastria pain, burning and other ulcer symptoms.⁷ Suppression of nocturnal pain is "outstanding."¹³ Maximally effective doses may be given with minimal side effects, and the incidence of unwanted anticholinergic effects is negligible.^{3,7-14}

Whatever the ulcer theory...the fact is that

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(brief summary follows)

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Indications: In addition to its primary indications for duodenal and gastric ulcer, Robinul (glycopyrrolate) is indicated for other GI conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Dosage should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet 3 times a day: in the a.m., early p.m., and at bedtime. *See product literature for full prescribing information.*

Supply: Robinul (glycopyrrolate 1 mg.); Robinul Forte (glycopyrrolate 2 mg.); Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming.) In bottles of 100 and 500 scored tablets.

References: 1. Jones, F. A., and Gummer, J. W. P.: *Clinical gastroenterology*, Springfield, Ill., Charles C Thomas, 1960, pp. 322-3. 2. Bockus, H. L.: *Gastroenterology*, 2nd ed., vol. I, Philadelphia, Saunders, 1963, p. 468. 3. Sun, D. C. H.: *Ann NY Acad Sci* 99:153 (Feb. 28) 1962. 4. Moore, V. A.: *Postgrad Med* 38:216 (Sept.) 1965. 5. Dragstedt, L. R., Woodward, E. R., Storer, E. H., Oberhelman, H. A., Jr., and Smith, C. A.: *Ann Surg* 132:626 (Oct.) 1950. 6. Posey, E. L., Jr., Smith, P., Turner, C., and Aldridge, J.: *Amer J Dig Dis* 10:399 (May) 1965. 7. Lamphier, T. A., Siegel, L., and Goldberg, R. I.: *Amer J Gastroent* 37:551 (May) 1962. 8. Kasich, A. M., and Fein, H. D.: *Ibid* 39:61 (Jan.) 1963. 9. Epstein, J. H.: *Ibid* 37:295 (Mar.) 1962. 10. Moeller, H. C.: *Ann NY Acad Sci* 99:158 (Feb. 28) 1962. 11. Slinger, A.: *J New Drugs* 2:215 (Jul.-Aug.) 1962. 12. Barman, M. L., and Larson, R. K.: *Amer J Med Sci* 246:325 (Sept.) 1963. 13. Shutkin, M. W.: *Amer J Gastroent* 38:682 (Dec.) 1962. 14. Fleisher, B.: *J New Drugs* 2:211 (Jul.-Aug.) 1962. **A. H. ROHNS CO., INC.**
Richmond, Virginia

EDITORIAL SECTION

(Continued from Page 236)

Chapter of Genesis will be written to conform with the decision. We will probably delete the confession and simply say Abel was slain by a person or persons unknown."

Mayor John Lindsay of New York: "This case proves the absolute necessity of having a police review board."

Atty. Gen. Katzenbach: "My department is making a careful study of the decision and, if the circumstances warrant it, I shall not hesitate to institute impeachment proceedings against the Officer for obstructing the law. And, if necessary, I shall send federal deputies to bring Him into custody."

The Officer in question could not be reached for a statement. He is said to be the head of a religious cult, but some local churchmen I queried indicated they thought He had passed away recently.

—Reprint from *Human Events*

Research Program Uses Engineering Knowledge

A research program to apply engineering knowledge to problems in medicine will be set up at Columbia University under a grant from the National Institute of General Medical Sciences, National Institutes of Health.

The award of \$125,324 for the first year was made available by the Heart Disease, Cancer, and Stroke Amendments of 1965.

Planned projects include studies of the metabolic effects of anesthetics in man, the uptake and distribution of anesthetic agents (especially in infants and children), and thermal influences upon metabolism in premature infants. Other projects will be concerned with the measurement of oxygen uptake, the distribution of tracer materials, and further refinements in the art of measuring and recording parameters of interest in shock.

EXCERPTS FROM REPORT OF PRESIDENT JAMES G. DONALD

(EDITOR'S NOTE: In his "President's Message" to Counsellors and Delegates at the annual convention of the Medical Association of the State of Alabama, April 21-23, 1966 marking the end of a distinguished administration, Dr. James G. Donald cited graphic evidence that physicians of Alabama are active on numerous fronts to conserve the best interests of both patient and doctor in this era of social revolution. Excerpts from his Message follow:)

Since my inauguration as your President one year ago, radical changes have occurred in State and Federal legislative halls affecting the socio-economic aspects of medicine which will vitally concern each physician in Alabama. Consequently, these matters have required and still require countless hours of travel, study, discussion, evaluation, recommendation and decisive action on the part of all the Officers, Boards and Committees of your Association. . . .

Today I have chosen to discuss with you some of the significant developments of the past year as they will affect the future of medicine in Alabama. . . .

The members of the Board of Trustees have been most faithful in the performance of all their duties. Meetings have been held monthly, with but few exceptions, and have each required many hours of study and discussion to solidify recommendations to the Board of Censors. This has relieved the Board of Censors of much of the work load relating primarily to Association business, but has left with them final authority to act for the Association as specified in the Constitution. Of equal importance, the larger and geographically distributed membership of the Board of Trustees has served to bring the opinions of the County Societies and individual members to the conference table and, conversely, to interpret plans and actions of the State Association at the local level. It is

most appropriate to express the appreciation of the Association to these faithful Trustees.

Public Law 89-97 "Medicare"

One of my first official duties as President was to accompany Doctor John Chenault, representative and spokesman for the Medical Association of the State of Alabama, when he went to Washington last May to express to the Senate Finance Committee our official opposition to passage of the so-called "Medicare" law. The Medical Association of the State of Alabama, as did the American Medical Association, vigorously opposed the passage of this law because, for the first time in the United States, it imposed a compulsory tax to pay for hospital costs for a significant segment of the population regardless of need. This principle could easily be extended to include all medical services and all age groups regardless of need and would then be full-scale socialized medicine. Since the law was passed, in spite of the opposition of organized medicine, the American Medical Association has taken the position that it should be available for consultation and advice to the Social Security Administration to attempt to have regulations written which would disrupt the patterns of practice and physician-patient relationship as little as possible. . . .

Hospital-Based Specialists

The American Medical Association, the Medical Association of the State of Alabama, and all the professional specialty colleges and societies involved were pleased that the services of physicians—most particularly pathologists, radiologists, and anesthesiologists, were not legally classified as "hospital services" in Public Law 89-97. Since the law has properly included the professional services of these specialists in the same category as that of other physicians—in Part B of the law, it is particularly important that members of the Alabama Hospital Association, the Medical

The full text of Dr. Donald's report appears in the 1966 Transactions.

(Continued on Page 268)

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DOSAGE: *Children under 25 pounds*—5 mg. per pound of body weight every six hours. *Children 25 to 50 pounds*—125 mg. every six hours. *Adults and children over 50 pounds*—250 mg. every six hours. For severe infections, these dosages may be doubled.

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

September, 1966

No. 3

Knee Ligament Injury In Athletes

Jack C. Hughston, M. D.

Columbus, Georgia

Tears of the ligaments are the most disastrous knee injuries in athletes. Why? Because they are semi-emergencies! They need to be correctly diagnosed and treated, at least within the first few days. But, it seems, most knee injuries are automatically considered a tear of the knee cartilage¹ (meniscus). And, physicians correctly know a torn meniscus is rarely a surgical emergency, and that immediate diagnosis as to the precise cause of the internal derangement is difficult. Physicians know that if conservative treatment of the knee "strain" (torn meniscus) doesn't return the knee to normal within a few weeks, there is still enough time for definitive treatment without harm having been done. So, the knee is observed for a few weeks. Recognition a few weeks later, of it being a ligament tear, is too late for obtaining an excellent knee. Results from reconstructive surgery on the ligaments runs a very poor second to primary repair at the time of the acute injury. True, some ligament tears which appear initially to need surgical repair, prove later to be functional without treatment of any type. Unfortunately, in a sense, these cases are in a minority. They are boys and girls who have an unusual kinesiologic sense, whereby, the muscles compensate for the ligamentous instability. When such an athlete later assumes a sedentary life,

whether it be after college ball or after pro ball, his muscles begin to lose tone and he develops knee disability.

Thus, a definite distinction between a ligament tear and an internal derangement is most important. And, with sufficient knowledge, observation, and some experience, ligament tears can be determined early.

Diagnosis

How are these ligament tears diagnosed? It is best if the doctor can be at the game and see the accident. When one sees a knee bend sideways from a block or clip, he immediately senses a ligament injury. (Figs. 1 & 2) Immediate examination will often demonstrate instability because pain is minimal initially, and splinting by muscle spasm has not developed. If the knee is unstable on the first test, but not on the immediate second attempt, the ligaments are torn! One positive test proves they are torn! The first test may stimulate muscle spasm which prevents signs of instability on the second test. After muscle spasm develops, subsequent clinical demonstration of instability within the first week following trauma may necessitate examination under anesthesia. If the accident wasn't observed and the knee not examined at that time, but the history indi-

cates a mechanism compatible with a possible ligament injury, and the athlete continues to have functional disability for playing ball the following day, and examination demonstrates severe tenderness over the ligamentous areas but no demonstrable instability, one should weigh the history and associated findings to evaluate whether examination under anesthesia is indicated. Naturally, the more experienced one is in examining for knee instability, the more he will be able to demonstrate and evaluate it without anesthesia, even in the presence of muscle spasm.

A tear of the ligaments about the inside (medial aspect) of the knee are more frequent than outside (lateral) ligament tears. The "unholy triad" is the most frequent type of tear of the medial compartment of the knee. No presentation on knee ligaments would be complete without an illustration of this disaster. (Fig. 3) Tenderness and mild soft tissue swelling are often present over the medial and proximal tibia (this is the area of tear of the tibial collateral ligament from the medial surface of the tibia as illustrated at "B" in Fig. 3). There often is no swelling (effusion) within the knee joint itself (this is due to the joint fluid being able to escape at the area of the capsular ligament tear as illustrated by "A" in Fig. 3, and then the fluid extravasates through the soft tissues of the thigh and leg in the region of the knee). The patient may come in walking stifflegged without aid. Passive flexion past a right angle is usually painful, and is resisted. Many other suggestive signs may be present. But, the only sure sign is the abnormal "opening" of the medial space in response to abduction stress. This test is accomplished by flexing the knee thirty (30) degrees from completely straight, placing one hand on the outside of the thigh, just above the knee, the other over the medial aspect of the leg, and trying to force the leg into abduction at the knee. (Fig. 4) It is important to first examine the normal uninjured knee to show



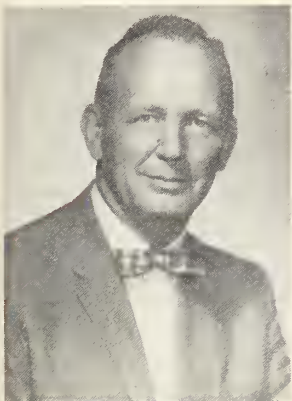
Figure No. 1: "Clipping" is the most common mechanism of ligamentous injury to the knee joint, so much so, that the opposing team incurs a 15 yard penalty. The player is struck from the posterolateral aspect of the knee joint at the time that the involved extremity is weight bearing and thus, the medial aspect of the knee joint is forced open with a resultant tear of the ligaments about the medial side of the joint.

the patient what you are going to do, to gain his confidence that you are not going to hurt him, and to demonstrate to yourself what constitutes normal stability in this patient. Now, let's surmise the athlete has injured his right knee and go through the mechanism of testing it: Stand facing the patient to the outside of the right knee, place the left hand firmly on the outside of the right thigh at about the level of the knee or just above it, place the right hand around the inside of the mid-third of the right leg, flex the knee about 30 degrees from straight, then apply pressure on the thigh with the left hand pushing toward the center line of the body, and with the right hand, bring the leg toward your body. If there is ligamentous instability on the me-

(Continued on Page 246)

ABOUT THE AUTHOR

The author of this article is a native Alabamian, born in Florence April 17, 1917. He was graduated from Louisiana State University



Dr. Jack Hughston

School of Medicine in 1943 after spending the years 1934-38 in undergraduate studies at Auburn University and has been a practicing orthopaedic surgeon at Columbus, Georgia, since 1949.

He has received wide recognition as Orthopaedic Consultant to the Auburn University Athletic Association. He was Chairman of the Medical Aspects of Sports Committee, Medical Association of Georgia 1960-65, and is a member of the Committee on Sports Medicine, American Academy of Orthopaedic Surgeons, the Committee on Medical Aspects of Sports, American Medical Association, the American College of Sports Medicine, and Honorary Member, National Athletic Trainers Association.

He prepared this article at the request of the *Journal* of the Medical Association of the State of Alabama, accompanying it with a letter containing the following observations:

"It was about 1952 when I began working with the Auburn Athletic Association and their excellent trainer, Mr. Kenny Howard, Coach Ralph Jordan and Coach R. L. Beaird. Doctor Morgan Brown is the team physician for Auburn and has always been most cooperative and helpful and has greatly facilitated the orthopaedic care of these boys. I have merely acted as the orthopaedic consultant to him and to Kenny Howard.

"Kenny Howard has been one of the outstanding members of the American Athletic Trainers Association and we presented some of the work in which we have been interested to this Association. We presented 'Myositis Ossificans in Athletes' at their national meet-

ing in Miami in 1958 and 'Knee Ligament Injuries' at their meeting in Madison, Wisconsin, in 1961.

"In working with Kenny Howard and Doctor Brown we began to see many difficulties in athletes arriving at Auburn as a freshman, where the injuries had been incurred during their high school activities and where the treatment rendered had been through cultists working as so-called team physicians. This led us to begin 'barn-storming' at the County Medical Societies with presentations on athletic injuries and encouragement to physicians to become interested and to begin looking after the high school injuries as their team physicians.

"It was this 'barn-storming' that caught the attention of the Medical Association of Georgia and resulted in their establishing a subcommittee on athletic injuries to the Committee on School Child Health and appointed me, for the time being, to arrange annual programs directed jointly toward the physicians, trainers, and educators for the continued improvement in the prevention and care of the injuries and other disorders as related to athletes.

"As you know, the AMA developed the Medical Aspects of Sports Committee and began conducting a one-day conference along these lines in conjunction with the clinical meeting of the AMA. The first of these was in Dallas. These conferences have been held for the trainers, educators, and physicians. Kenny Howard and I have attended most of them. Out of our interest we have made some scientific presentations at some of these meetings relative to the work at Auburn.

"This field of orthopaedics has been most interesting and the accomplishments could never have been possible without the wonderful cooperation and enthusiasm of the orthopaedic surgeons in the home towns of these boys who have participated in athletic activities at Auburn University.

KNEE LIGAMENT INJURY IN ATHLETES

(Continued from Page 244)

dial side of the knee, you will feel an abnormal looseness and may see the leg swinging out of line. If there is much muscle spasm, you may feel the knee open medially and snap back together. Abduction stress testing with the knee straight in complete extension will often give you a false sense of stability, because with the knee in extension the posterior capsule and posterior cruciate ligament are taut, and will not allow opening of the

joint space even when all the medial ligaments are torn.

The collateral ligaments on the outside of the knee are tested by reversing the hands and reversing the maneuvers to produce an abduction stress.

An All Southeastern Conference guard in his junior year was blocked, and the trainer and physician observing the game saw the accident, and felt sure that the player's knee ligaments must be torn. (Fig. 5, 6 & 7) On

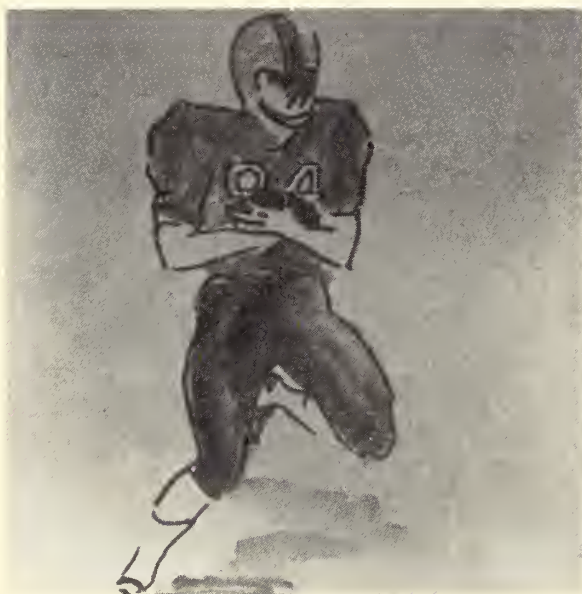


Figure No. 2: This player is running down field and cutting in order to avoid an opponent. Injury of the weight bearing knee during the "cutting" maneuver is most often an internal derangement, rather than a ligamentous tear. However, if the muscles are not in complete coordination during the process of the maneuver, then the formidable stress placed on the ligaments will cause a "silent" rupture of the capsular and anterior cruciate ligaments, producing a rotary instability⁴ clinically manifested by a severely positive anterior drawer sign (Refer to Fig. 8 for description of this test). In the absence of having been struck by an opponent at the time of the injury, we are not likely to associate the mechanism with a tear of the ligaments.



Figure No. 3: This is often termed O'Donoghue's unholy triad because of his classical description³ of the disorder. It consists of a tear of the medial capsular (A) and tibial collateral (B) ligaments, a tear of the medial meniscus (C), and a tear of the anterior cruciate ligament (D).

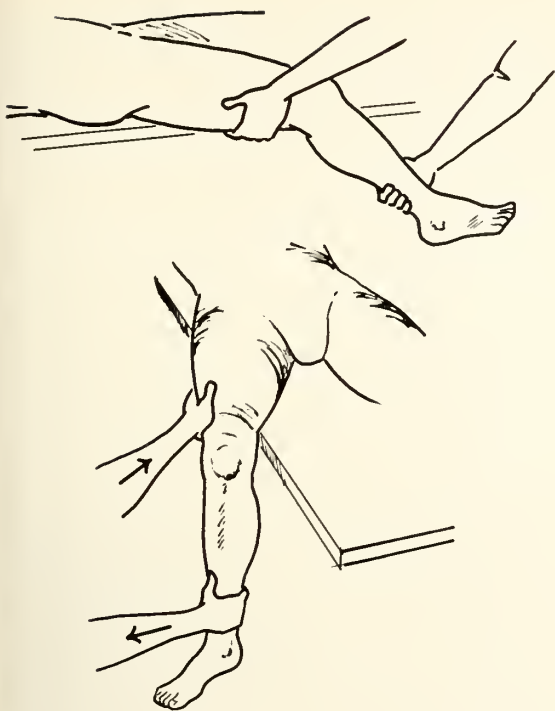


Figure No. 4: The abduction stress test is carried out with the patient in a sitting or supine position and may be carried out with him lying on the ground or on the examining table, depending upon the circumstances. The

top portion of the illustration demonstrates the knee flexed at 30 degrees; it is extremely important to have the knee flexed in this manner while carrying out the abduction stress test in order to relax the posterior capsule and posterior cruciate ligament. If the knee is tested in extension, all of the medial ligaments and the anterior cruciate ligament may be torn and you would be unable to elicit any sign of instability because of the tautness of the posterior cruciate ligament and the posterior capsule. With the knee in a moderate degree of flexion, the posterior capsule is relaxed and a lack of continuity of the ligaments about the medial aspect of the knee joint will allow a sensation of a giving away of the inside of the knee joint on carrying out this test.

The lower illustration shows the proper placement of the hands, the one hand being placed at the outside of the knee joint or just proximal to the knee, while the other hand is placed about the inside of the mid or lower third of the leg. The hand at the knee joint forces the thigh toward the center line of the body while the hand about the leg pulls away from the center line of the body.

their initially testing the knee joint on the field, they felt that the knee "gave away" on application of the abduction stress test. They were not able to reduplicate any evidence of instability on immediate subsequent tests. All attempts, that day and for the next four days, to obtain a clinically positive abduction stress test, failed. The knee did not swell. The player was able to walk somewhat stiff-legged without crutches and able to attend his classes. No ecchymosis appeared. Pain was not sufficient to necessitate narcotics even for rest at night. He attended work outs in his shorts and walked around the field. On the fourth day post-injury he was still unable to run or cut. On seeing him on the fifth day, the muscle spasm had subsided sufficiently to allow clinical demonstration of the instability of the medial ligaments by the abduction stress test. Operation the subsequent

day demonstrated the torn tibial collateral ligament from the medial face of the tibia, the torn medial capsular ligament from the joint margin of the tibia, and the torn medial meniscus. The meniscus was excised. The ligaments were repaired. The subsequent year the player was able to return to his previous quality of performance. He has now pursued sedentary life for the past several years with no subjective or objective evidence of ever having injured the knee. This case is presented in detail to point up the salient features; that one positive test is diagnostic; that protective muscle spasm can, and sometimes does, occur rapidly post-injury so if you do not see the player immediately you may not obtain even one positive test; that ability to remain ambulatory without pain and without crutches does not indicate an absence of ligamentous tear (these

boys are often stoic and their muscles big and strong); that the absence of swelling and ecchymosis does not indicate the absence of ligamentous tear; that suspicion of the ligamentous tear needs to be followed up with daily clinical re-evaluation of the ligamentous stability by the abduction stress test; and, that the player is unable to run and cut for the next several days (as stated previously, he may be able to function normally after the acute phase has subsided due to an unusual inherent kinesthetic sense which substitutes for the ligamentous instability so long as the muscle tone is maintained at a level compatible with athletic participation).

Arterial Injury

In any acute case of suspected ligamentous injury to the knee, palpate for the anterior and posterior tibial artery pulsations at the ankle and foot. The circulatory status of the leg distal to the knee must be ascertained with certainty, and immediately. The color of the foot may appear normal. The skin may feel warm. But still, the popliteal artery may be ruptured. The only reliable test for adequate circulation distal to the site of the injury is palpation of the arterial pulsation at the ankle joint. If a popliteal artery rupture is recognized immediately, and treated immediately, the athlete's leg has a fair chance of being saved.

Treatment

I have approached these ligament injuries with considerable conservatism. Probably too much so. I have not operated but two cases where, at operation, I felt the operative findings may not have indicated the necessity of an open repair; I have treated several cases conservatively by six weeks plaster immobilization, where subsequent instability has made me regret I had not done an operative repair initially. Who was it said "Experience is learning from one's mistakes"? But, how much better it is to learn from another's mistakes; and therein lies the value of medical literature. So, I'm coming to believe our approach to the treatment of knee liga-



Figure No. 5: The capsular ligament is indicated by (A) which is being retracted proximalward and anteriorly over the medial femoral condyle. This has been avulsed from the medial surface of the tibia (a). The tibial collateral ligament (B) has been avulsed out from under the pes anserinus group of muscles which lie distal to the site indicated by (b). The torn medial meniscus (M) is seen being retracted proximal as still an integral part of the medial capsular ligament.

ment tears should be similar to the general surgeon's approach to the appendix: if you can't feel certain that it will recover to normal without surgery, then operate with the realization that you are going to find a few "normal" ones.

It is not within the scope of this article to go into the details of technique of surgical repair. It is sufficiently complicated and varied that "book learning" won't teach it to you;

it should be learned by working with some one experienced in these injuries.

Restoration of joint stability must be obtained at the time the wound is still open. The joint does not become tighter (more stable) later after the operation; words to the contrary are a fable. If testing the first attempted repair demonstrates that some looseness persist, the sutures must be removed from the ligaments and fascia, and repaired again in a different manner. On occasions, before skin closure, I have redone the repair as much as three times on a single case in order to obtain the desired stability.

Rehabilitation after discontinuance of plaster immobilization is important. Knee motion should be regained steadily but not too rapidly. Too rapid a return of a full range of motion can only occur by a tearing of the recently healed tissues.

Results

In acute cases in athletes, where ligamentous stability has been restored, functional ability has returned to the level of quality of their pre-injury status.² There is no injury of similar severity wherein the results of successful treatment are more gratifying. The objective in treatment of the athlete is to return him to 100 per cent of his previous normal; he must return to compete with the best.

Philosophy

These youngsters deserve all the excellent help we can render them. Have you taken a moment to realize that sports participation is one of the few remaining areas of their life where they are taught to achieve excellence, rather than mediocrity? To say it another way, there is no welfare program on the football field.

As some of you may know, due to my geographical proximity I have had the privilege over the past few years of working with the Auburn University Athletic Association

and caring for those boys who desire to be treated by me because it would take them less far from their school duties and activities. Through this, I treasure the fine cooperation and understanding of the orthopaedist of this area and the physicians in whom these boys' families have sought counsel. Working with these fine youths, and with Coach Jordan and his staff, and especially his trainer, Kenny Howard, and watching these youngsters get back to playing has been a real thrill.

I have worked with the high schools in Columbus in a similar fashion and would like to urge every physician to be sure that no high school game is played without medi-

(Continued on Page 251)



Figure No. 6: A closer view with abduction stress being placed on the knee demonstrates the entire medial tibial plateau articular surface (T).



Figure No. 7: A close up view demonstrates the considerable tearing of the medial capsular ligament (A), a tear of the medial meniscus (M), the normal articular cartilage of the medial tibial plateau (T), and the raw edge of the tibial plateau (a) from which the medial capsular ligament was avulsed and to which it will be reattached by sutures going into the bone. Naturally the torn medial meniscus has to be removed. Whenever the medial capsular ligament is torn from the tibial plateau surface, the medial meniscus is usually torn and has to be removed. The tibial collateral ligament (B) was repaired to the tibial condyle distal to the area indicated by (a).

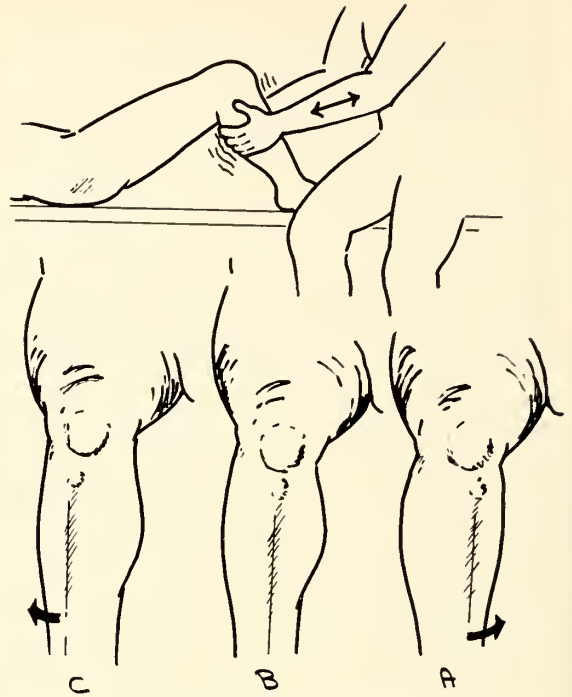


Figure No. 8: To test the stability of the cruciate ligaments and the medial capsular ligament of the knee joint, the patient is placed in a supine position, the hip flexed 45 degrees, the knee flexed approximately 90 degrees or a little less, the examiner sitting on the dorsum of the foot of the leg being examined, and then grasping the leg just below the knee and exerting a repetitious pull and push motion. The repetitious motion also helps to produce a relaxation of the hamstrings. The position of rotation of the tibia is very important in the carrying out of this test. If the tibia is held internally rotated "A", the ligaments can be torn and there will be no positive anterior drawer sign. With the tibia in a neutral position "B", the ligaments can be torn and there will be a mild to moderate anterior drawer sign. With the tibia fixed in a slightly externally rotated position "C", the maximum amount of instability can be demonstrated with a resultant severely positive anterior drawer sign, because with the tibia externally rotated the posterior cruciate ligament is in its most relaxed position.

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(Continued from Page 249)

cal attendance. Active participation in covering these games will prove one of the most stimulating and soul rewarding extracurricular activities a physician can pursue.

Physician coverage of athletic games is not a new field of medicine; it has been a lost art since the last Greek school of medicine disappeared with the fall of their great center at Alexandria at about 30 B. C. Hippocrates, about the year 400 B. C., studied athletic medicine under Herodicus, and the Greek physicians covered all the public games and Olympic events. Thus, coverage of athletic games is our democratic heritage and our Hippocratic duty.

Conclusion

Ligamentous tears of the knee must be considered, and proven or ruled out, in any acute knee injury. Diagnosis must be accurate; treatment must be prompt. By our efforts, disability resulting from athletic pursuits can be minimized.

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EARLY RECOGNITION MAY SAVE POTENTIAL DELINQUENT

Observations based on work with delinquents suggest that the behavior and personality trends an individual displays before he is labeled a delinquent are clues which could save him from becoming one. These trends may be seen before age five, before any overt antisocial behavior. Therapy begun with this recognition may be all the corrective stimulus needed to produce lasting beneficial effects. Attributes of the potential delinquent are an apparent mental maturity beyond his years, average to above average intelligence, powers of keen observation, and a characteristic pattern of interpersonal relations. In his dealings with others he displays his hallmark: speech and actions which have the double purpose of angering authority figures and pleasing himself. Another trait in the potential delinquent is evasiveness in accepting personal responsibility. Still another is an antipathy to answering questions directly. Delinquent behavior has the dual purpose of hurting another while enhancing one's own ego and usually takes the form of antipersonal action. When parents, educators, the general physician, family counselor, and minister learn to recognize the predelinquent, they can help him to help himself. (J. M. Stubblevine, M. D.: "The potential delinquent," *Mental Hygiene*, October 1965).

Preventable And Avoidable Cancers and Cancers Arising From Personal Indifference

Wendell G. Scott, M. D.

Professor of Clinical Radiology

Washington University School of Medicine

Saint Louis, Missouri

The field of cancer prevention offers greater possibilities for the control of cancer and the saving of lives than any other measure we have at our command today. Surely it is better to prevent the occurrence of a cancer than it is to try to cure it once it has occurred.

It may be surprising to some of you that cancer can be looked upon as pre-eminently a social disease and as a public health problem. It is a social disease because, as we shall see, social conditions contribute heavily to its cause and social measures are required for its control. Economic circumstances also have a direct bearing on this disease. For example, a recent study¹ of the records of the California tumor registry indicates:

That cancer of the cervix is twice as frequent in the lowest income groups as in the highest;

That among men, lung and stomach cancer strike the lowest income group twice as frequently as it does those with the highest incomes;

That only 1/3 of the cancer patients in county hospitals received early diagnoses,

while 1/2 of those in private hospitals received the benefits of early diagnosis;

That as a result of early diagnosis and better treatment, 62 per cent of private hospital patients with cancer of the cervix survived five years or more but only 39 per cent of the county hospital patients survived five years; and

That 2/3 of the women in the highest social class had at least one Pap test, but less than 1/3 of the women in the lowest income group had received this benefit.

The understanding of these factors together with the knowledge that is being accumulated from the geographical pathology of cancer are the major developments in the control of cancer today. These are the factors I am going to discuss.

Until recently, the primary objective of cancer prevention has been limited to the early diagnosis of malignant disease, and preferably at the pre-cancerous stage. Actually, the therapy of pre-cancerous lesions forms the cornerstone of cancer prevention, and with current methods of treatment, results in a high rate of cure. The knowledge about extrinsic carcinogens in man's environment has been developing so rapidly that it is now possible to eliminate or to control many of the factors that not only affect

Presented at the Annual Meeting of the Medical Association of the State of Alabama, Mobile, Alabama, April 22, 1966.

particular occupational groups, but also the general population.

The potential scope of cancer prevention is limited by the number of human cancers in which extrinsic factors are responsible. These include all environmental carcinogens, or cancer forming agents whether already identified or not, as well as "modifying factors" of intrinsic origin such as hormonal imbalances, dietary deficiencies, and metabolic defects. The types of cancer that are influenced by extrinsic factors, directly or indirectly, include many tumors of the respiratory system; the gastrointestinal and urinary tracts; the skin and mouth; the hormone dependent organs such as the breast, thyroid and uterus, and the blood and lymphatic systems. Collectively these account for about three-fourths of all human cancers.² *Thus it would appear that the majority of human cancers are potentially preventable.*

What do we mean by cancer prevention? It is defined by the World Health Organization Expert Committee on the Prevention of Cancer as "the elimination of, or protection against, factors known or believed to be involved in carcinogenesis and the treatment of pre-cancerous conditions."

Experimental evidence has established that there is a long latent period of carcinogenesis, as for example in carcinoma of the cervix, in which it has been found to be about eight years. During the latent period the events leading to the eventual development of the tumor may be stopped in a variety of ways:

1. By the prevention of the carcinogenic process from arising in the first place.
2. By prevention of the tumor from eventually developing.
3. By forestalling the development of the tumor by appropriate detection methods.

The signs and symptoms of pre-cancerous lesions are recognizable in many sites includ-

ing the skin, mouth, pharynx, esophagus, stomach, colon, rectum, female reproductive organs and breasts. In some cases they are first recognized by the alert patient. We should encourage people to be aware of them, and to consult a doctor on what may appear to them to be trivial matters, such as senile keratoses, leukoplakia, polyps of the gastrointestinal tract, unusual bleeding or discharge from a body orifice, a lump or thickening in the breast or in tissues elsewhere, a persistent change in bowel or bladder habits of two weeks duration, persistent hoarseness or cough, persistent indigestion or difficulty in swallowing, and a change in a wart or mole. These symptoms may NOT mean cancer, but any one of them should ALWAYS mean a visit to a physician.

The study of the incidence of cancer in different countries and even in different areas of the same country offers one of the most promising ways of obtaining new clues to the etiology of this disease. Geographic cancer pathology has become of age but much still remains to be learned about the incidence of the various types of cancer in Africa, in Asia, and Central and South America and elsewhere. Cancer incidence is not static, however, and rapid changes in the social and economic organization are taking place in almost every country. It is, therefore, important that information be obtained now, while big differences in the incidences of various cancers still exist in the undeveloped countries. Once lost, this opportunity may never return. This is why the American Cancer Society and the National Cancer Institute are encouraging and supporting epidemiology studies in many countries throughout the world and always with the hope that new carcinogenic factors in these environments may be found.

Until relatively recently, cancer prevention, considered in terms of elimination or protection against known carcinogens, has been restricted to a group of chemical sub-

stances known to give rise to cancer among limited occupational groups. We have now come to realize that these same compounds can gain entry into the general environment, the atmosphere, the water, and the soil, as potential carcinogenic pollutants and with increasing contamination may become of importance in the occurrence of cancer in the population at large.

The spectrum of such carcinogens is of necessity broad and encompasses every type of chemical agent, synthetic and natural, certain physical agents, viruses, and radiations of various types. In fact, man is in no position to ignore seemingly unimportant possibilities of other types simply because we don't know about them today.

The identification of those environmental factors that have a causal relationship in the development of cancer can provide us with a short cut in the control of many cancers. It is those cancers which are directly related to factors in our environment that I refer to as "Preventable and Avoidable Cancers and Cancers Arising from Personal Indifference."

The classical example and the first identification of an environmental chemical causative agent of cancer in man was cancer of the scrotum.³ It was a common occurrence among chimney sweeps, nearly 100 times more frequent than in the general male population. It was caused by their years of contact with soot. When this was realized, protective clothing and cleanliness were instituted and this avoidable cancer has practically disappeared. Sir Percival Pott made this acute observation in England in 1775.³

The most common of all cancers, cancer of the skin, is an avoidable cancer. It occurs almost exclusively on those parts of the body exposed to sunlight; is more common in regions of the earth receiving more ultraviolet radiation; is much more frequent in the light-skinned people than in dark-skinned, and appears most often in people engaged in outdoor occupations. It is induced by prolonged over-exposure to sunlight, to ultraviolet lamps, to arsenic, to certain oils and chemi-

cals, all of which agents it is possible to avoid, and thus to prevent this form of cancer.

Because it occurs on the skin, it is easily seen, recognized early, promptly treated and cured. The cure rate for skin cancer is 93 per cent in the United States, but because of the high incidence the seven per cent failures account for over 4,000 unnecessary deaths every year.⁴

Another cancer which is avoidable is a particular type that occurred in the bladder of upwards of 70 per cent of the chemical workers that were heavily exposed to aniline dye intermediates, and especially to betanaphthylamine.⁵ When this chemical was identified as the culprit and exposure to it was stopped, this particular cancer disappeared and the overall incidence of bladder cancer in this group of men returned to normal.

Recent studies by Wynder⁵ and associates report that cancer of the bladder is predominantly a male disease, that it is increasing in some countries, including the United States, and that cigarette smoking increases the risk of bladder cancer by about two-fold. They also point out that shoe repairers appear to have a higher incidence of bladder cancer and that they should be advised to handle dyes and polishes with more care, and to wash their hands frequently with soap and water as a means of reducing their higher risk to this disease.

The age-adjusted death rate for cancer of the bladder varies according to the country, from eight per 100,000 in South Africa to only two per 100,000 in Japan, and about four per 100,000 in the United States. In Egypt it increases to about 11 per 100,000, possibly due to the high incidence of schistosomiasis. It is reasonable to assume that the excess cases of bladder cases among male subjects are related to exogenous causes, and that preventive steps can contribute significantly to a reduction in bladder cancer frequency.

Among industrial workers it has long been known that about 50 per cent of the miners

in the pitchblende mines in Joachimsthal,⁶ and about 75 per cent of the miners in Schneeberg,⁷ both in Czechoslovakia, dying from natural causes, died from cancer of the lung brought about by their prolonged exposure to radioactive ores. At about the same time it was also recognized that the estimated life-time incidence of lung cancer in chromate ore refining workers was approximately 35 per cent.⁸ We are now learning that the inhalation of asbestos fibers⁹ can also be a responsible agent in the causation of cancer of the lung, as well as of malignant mesotheliomas of the pleura and peritoneum and that even mild inhalation of asbestos fibers¹⁰ is capable of giving rise to these malignant tumors. Likewise, the inhalation of beryllium salts and oxides² by workmen handling these products has proven to have a high carcinogenic potential in the production of lung cancer. It is a curious but well established fact that men refining nickel ores developed cancers of the ethmoid sinuses in a surprisingly high incidence.² Another substance, cobalt,¹ when accidentally injected or thrust beneath the skin almost invariably caused a cancer to develop at this site. Fortunately, exposure to all these carcinogenic substances can and are being eliminated by modern protective industrial practices and these cancers avoided.

The most important environmental causal agent in the production of internal cancer today is, of course, the prolonged inhalation of cigarette smoke. The evidence that inhalation of cigarette smoke is the major cause of lung cancer and a major health hazard is overwhelming from the statistical, the pathological, the experimental and the clinical evidence. Every medical and health organization in this country and abroad that has studied this subject has concluded that cigarette smoking is a serious health hazard. There have been no exceptions. Unfortunately, cancer of the lung is one of the most fatal of all cancers, with only five patients out of every 100 surviving five years.

It is tragic that the medical profession and the public have been so long in recognizing that cancer of the lung is largely an avoidable cancer. This cancer for the most part is due to the personal indifference of the individual who prefers not to accept the ever increasing evidence of the causal relationship between the inhalation of cigarette smoke and lung cancer. I choose to call this process "Cancer Arising from Personal Indifference."

An interesting report by Moore¹¹ appeared in the *Journal of the American Medical Association* for January 25, 1965, in which he divided a group of 102 smokers, all of whom had been "cured" of mouth or throat cancer, into two groups: 65 who continued smoking, and 37 who stopped. Within approximately six years about 1/3 of those who continued smoking acquired a second "tobacco area" cancer, while only two of the quitters developed second cancers in this same period. It was also significant that most persons in their locality who developed mouth and throat cancer smoked cigarettes, and those who continued to smoke and developed second cancers were nearly all cigarette smokers. In the past the impression has been that only cigar and pipe smokers, or tobacco chewers, acquired mouth cancers, but from this study it would appear that tobacco in any form can cause cancer of the mouth and throat.

I wonder if any of us as recently as five years ago would have predicted that cancer of the cervix in women would be considered an avoidable cancer today. Twenty years ago this cancer was the Number One killer of women. During this interval the death rate from cervical cancer has dropped about 50 per cent. In recent years the "Pap" test has given a tremendous impetus to the control of cervical cancer. A 1964 survey by the Gallup Organization indicated that 48 per cent of adult women claimed to have had a "Pap" test, whereas in 1961 this figure was only 30 per cent. From this data we can assume that

27½ million women have had at least one test, but this is not enough. Every woman should have this protection.

The efficiency of the "Pap" test in the control of cervical cancer has been demonstrated in Louisville, Kentucky,¹² where Pap smears have been done on a large group of women for the past ten years. For the last seven years not one single case of invasive cancer of the cervix has appeared among these women, proving that yearly cytological screening provides essentially 100 per cent protection, and one can say that a death from cancer of the cervix is a preventable death. It need only occur from personal indifference.

It may also be considered an avoidable cancer as well, for investigators are now finding a causal relationship to certain environmental factors. Cervical cancer has a much higher incidence in countries where adequate personal hygiene is difficult to obtain, and has the lowest incidence in countries in which the plumbing facilities are better. In Singapore it was demonstrated to me that those women who have access to a private bathroom have a lower incidence of cervical cancer than those who do not. It is extremely rare in nuns, and has the highest incidence among prostitutes. It occurs more frequently in married than in unmarried women, and even more so in women who marry several times. It is more frequent in those who marry young and who initiate sexual relations at an early age. It usually appears about 20 years after sexual intercourse begins, which corresponds in latency period with that of other more accurately measured forms of cancer.

A somewhat related and another avoidable cancer is cancer of the penis. I say related because wherever the incidence of cancer of the cervix is low, so is the incidence of penile cancer, and where one is very common, so is the other. Penile cancer is probably the oldest of avoidable cancers. It has been almost non-existent among the Jews in whom circumcision is performed at the end of the first

week after birth as part of a religious rite. In Moslems circumcision is carried out before puberty, and they also have a low incidence of this cancer. In a series of 120 cases of this cancer at New York Memorial Hospital for Cancer and Allied Diseases, Dean¹³ reported that none of the patients had been circumcised in infancy. It has also been established that circumcision after the age of puberty is ineffective. In a country as health conscious as the United States, this cancer could be eradicated by mandatory circumcision and personal cleanliness. Where these practices are neglected the incidence is considerably higher as in Ceylon, South Africa, and Latin America. In India it may account for as much as ten per cent of all cancers in males and up to 20 per cent in China. Mexico, in fact, may have the world's highest known incidence of this disease. In the United States it amounts to from one to three per cent of all cancer.¹⁴

The changing social customs that can lead to cancer are complex and far reaching. Some customs, such as betel and nass chewing, are widespread and apparently satisfy important human desires. For instance, cancer of the oral cavity and pharynx is by far the most common neoplasm in India and the Philippine Islands. The Cancer Institute of Madras in India reports that 48 per cent of all malignant neoplasms were oral or pharyngeal in origin, with more than 20 per cent of them arising from the buccal mucosa. In contrast, buccal cancers in the United States account for only 4.6 per cent of cancers in males and 1.7 per cent in females.

In India, the Philippines, Ceylon, Burma, Pakistan and Guam the extremely high incidence of intraoral cancer occurs most frequently in the low income groups and is related to the national habit of chewing a mixture of tobacco and slaked lime with betel nut. This "quid" is placed in the mouth between the cheek and the gum and kept there most of the day. It stains their teeth and keeps their mouths filthy.

I have seen these "self-induced" cancers in

the Far East. It is pitiful to see these people when you know that these cancers are not necessary and that they are avoidable.

Unfortunately a similar habit exists in the southeastern United States. It is "snuff-dipping," and is a fairly common habit, especially among older women in low income groups. It is strongly suspected that this habit is associated with the increased incidence of intraoral cancer that occurs in this area.

Snuff is no longer sniffed in the nose as was fashionable in the 18th century. Today a pinch of this flavored, powdered tobacco is placed in the gingival buccal gutter. The users suck on the quid most of the time they are awake. This seems to be a particularly habit-forming use of tobacco, and the prolonged use of it to a limited area of mucosa produces severe chronic local irritation that is an ideal environment for any carcinogen in tobacco to exert its effect by direct contact.¹⁵

Snuff dippers' intraoral cancers are not just a casual or freak occurrence. The United States Department of Agriculture reports that 34 million pounds of snuff was sold in 1961 and much of it in the southern states and in the Pacific northwest.

Brown and associates¹⁶ in Atlanta, Georgia, recently published their experience on 394 cases of snuff dippers' cancer. They found that 78 per cent of the cancers that occurred in the buccal gutter were in women and 75 per cent of them were confirmed snuff users and kept the quid at this location.

A report from Nashville, Tennessee by Rosenfeld and Calloway¹⁷ found that of the women in a group of 525 intraoral cancers, 90 per cent of them had carcinoma of the gingiva-buccal area and were habitual users of snuff.

This is in contrast to reports from Buffalo,¹⁸ the Mayo Clinic,¹⁹ and from New York City,²⁰ in which cancers of the oral cavity and pharynx occur about five times more frequently in men than in women.

In the Central Asian Republics of the U. S. S. R. a habit known as "Nass-chewing" is practiced. Nass is the meat from the nut of the nass tree. It is mixed with tobacco, lime, ash, and butter, and the "quid" is placed under the tongue and between the lower lip and the gums. This practice also causes cancer to develop at the site of application similar to those we have just described.

In a narrow zone across Central Africa occurs an unusual type of cancer—Burkitt's sarcoma. It was first thought to be limited to African children. More thorough studies revealed that it can appear in children of all races—European, Asian, Indian, as well as in adults, but this high incidence occurs only in those who live in areas within this belt which have an elevation of less than 5,000 feet; an annual rainfall of more than 200 inches, and a temperature that does not fall below 60 degrees Fahrenheit. These conditions suggested that this type of cancer could be due to a virus that was possibly transmitted by a vector such as a mosquito.

These possibilities have now been almost confirmed by Dr. Michael Epstein of the Middlesex Hospital Medical School in London, who has been able to grow the cells of Burkitt's sarcoma in tissue culture and to show that these cells elaborate a virus-like particle believed to be the causative agent.

It should be pointed out that recently O'Connor²¹ has shown that a similar tumor occurs in children in this country, and Dorfman²² has demonstrated the same condition in children in Missouri. They both believe that lymphosarcoma in children in the United States, while being a rare disease, is similar to Burkitt's tumor in Africa in age distribution, clinical manifestation, cause and histological appearance. The unusually high incidence in a particular geographic area in Africa, its predilection for the bones of the jaw and face and the rarity of leukemic transformation, may reflect an attendant host susceptibility in children in that area in addition to the environmental factors.

There is a similar group of cancers which

appear to be related to causal factors in our environment which we have not yet identified. The first of these is cancer of the stomach, which has been showing a remarkable decline for the past 30 years in the United States for no known reason. At the same time cancer of the stomach has been continuing to increase in Yugoslavia, Mexico, in India, and particularly in Japan, where it is the Number One cancer. It also continues to be a major cancer in the Soviet Union and the Countries behind the Iron Curtain, as well as in Iceland. Why? We don't know. It might be related in some way to the low protein diet of these people, but we are not certain. The Japanese who live in the United States do not have the same high incidence. The cause appears to lie in the difference in the environmental food habits of these different peoples.

We would like to know why American women have about seven times as much cancer of the breast as Japanese women. We think that there is some connection in the length of time they spend in nursing their children, but we need much more research into glandular and related functions to make sure. We should also like to know why cancer of the breast is more frequent in unmarried than in married women.

Cancer of the colon and rectum in the United States is the Number One internal cancer among men and women; 46,000 deaths will occur from it this year, and there will be 76,000 new cases. It is the only cancer in which the incidence is the same in both sexes. Yet in the same countries that have a high incidence of cancer of the stomach there is low incidence of cancer of the colon. It is infrequent in Mexico, Latin America, India, and in Japan.

Epidemiological studies just completed by Haenszel²³ of the National Cancer Institute show a definite increase in cancer of the colon in people in urban communities as compared with those in rural communities, and

an appreciably higher rate in people of the northern part of the United States as compared with those in the southern states. These findings remain consistent in migrants from the northern states to the southern states, and vice-versa, as well as in migrants going to and from rural and urban centers.

It is interesting that colon cancer occurs only one tenth as frequently among the members of the Bantu tribe in Southeast Africa as it does with us. Yet cancer of the liver which accounts for 50 per cent of all cancer deaths among the Bantus, accounts for less than four per cent in Europeans and North Americans.²⁴ Again we must search for environmental factors to account for this contrasting incidence. Scientists speculate that it is probably due to the monotonous diet of the Bantu tribesmen which is deficient in milk and in meat in the early years. This may be the predisposing cause that leads to cirrhosis of the liver from which this form of cancer appears to develop. The opportunity exists here to identify the environmental carcinogens and add another preventable cancer to our list.

I will only mention the problem of the carcinogenic potentials of pesticides, of food additives—such as colors, flavors, emulsifiers, antioxidants and fungal contaminants. Likewise, cosmetics and certain medical preparations can only be listed, because they are very complex and much work needs to be done in this field.

From this discussion on preventable and avoidable cancers, and on "cancers arising from personal indifference," it is obvious that epidemiological studies must be continued in the search for causal environmental factors and that we must promote public health measures for the control of many cancers. We must educate people about preventable cancers and that the combating of certain deleterious social customs and addictions, as well as economic factors, is a necessary long term process requiring research efforts in sociology, in psychology, and in health education.

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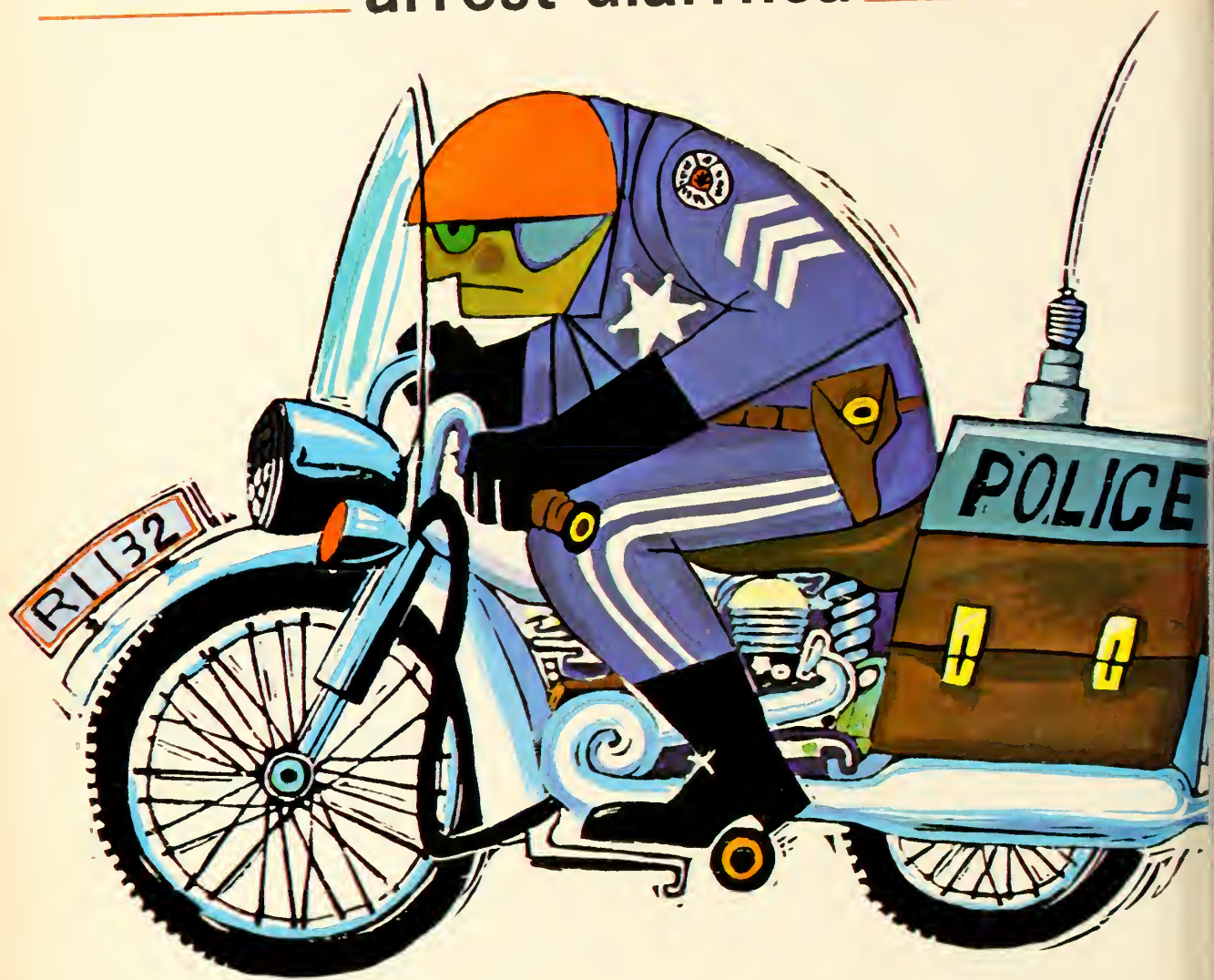
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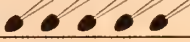
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Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months	3 mg. 	½ tsp. 3 times daily
6-12 months	4 mg. 	½ tsp. 4 times daily
1-2 years . . .	5 mg. 	½ tsp. 5 times daily
2-5 years . . .	6 mg. 	1 tsp. 3 times daily
5-8 years . . .	8 mg. 	1 tsp. 4 times daily
8-12 years . .	10 mg. 	1 tsp. 5 times daily

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

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Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.



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Proper antibacterial therapy for individual cases should help in reducing the total number of cases in an epidemic situation.

Side effects are infrequent. A few hypersensitivity reactions to Furoxone have been reported including a fall in blood pressure, urticaria, fever, arthralgia and a vesicular or morbilliform rash. These reactions subsided promptly following withdrawal of the drug. Primaquine-sensitive patients may develop a mild reversible hemolytic anemia. Nausea, emesis, headache or malaise may occur occasionally. To obviate alcohol-disulfiram type reactions, advise against use of alcohol-containing drugs during therapy and four days thereafter.

Do not give to infants under one month of age.

Composition: Furoxone Liquid contains, per 15 cc. tablespoonful, furazolidone 50 mg., pectin 225 mg., and kaolin 3.0 Gm. Furoxone Tablets each contain 100 mg. of furazolidone.

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PRESIDENT'S REPORT

(Continued from Page 241)

Association of the State of Alabama, the specialists involved, and the carriers cooperate to adapt existing arrangements to this ethical and legal concept. This will be difficult, but with cooperation between the groups involved and the hospitals, and with proper information to the public, this can be accomplished.

Direct Billing under Public Law 89-97

The American Medical Association has pointed out that Public Law 89-97 allows physicians to either bill their patients directly, or to take an assignment of benefits due from the carrier for the professional service. In the direct billing method, the physician deals directly with the patient on the basis of his usual fee and expects the patient to pay his bill. The patient then will submit the receipted bill to the Part B carrier, who will reimburse him with 80% of the "carrier-determined" reasonable fee for the service rendered. Since this avoids physician acceptance of a service contract, it is likely that most physicians of Alabama will elect this method of billing. The other method, that of taking an assignment, requires that the physician accept the "carrier-determined" schedule of "reasonable fees" as full payment. Eighty per cent of this fee is paid by the carrier to the physician and twenty per cent is paid by the patient. Either of these methods of billing is acceptable for participating physicians. The method may vary from case to case as the physician chooses.

Blue Cross-Blue Shield

As you know, the Medical Association of the State of Alabama has never accepted a Blue Shield service contract. Many physicians of this State feel that Blue Shield fee schedules are unrealistically low—even though they are indemnity only—and that control of Blue Shield activities by the physicians elected by the Medical Association of

the State of Alabama is essential.

The great majority of Blue Shield plans in the United States operate under separate directorship from Blue Cross, but generally both operate from the same office and under direction of the same administrative officers and sales force. This method of operation has been suggested as the most desirable by one of the high officials of the Blue Shield Plans of America. This entire matter is under study at the present time by the Board of Censors of the Medical Association and the Board of Directors of Blue Cross-Blue Shield of Alabama.

Title XIX

Even more far-reaching than the much discussed Part A and Part B of Title XVIII is the co-called Title XIX of Public Law 89-97. This portion of the law expands the Kerr-Mills concept of grants-in-aid to States for the care of the indigent aged to include the needy of all ages. The law requires that the States make proper provision for quality care for these indigent groups and that the State programs must be comprehensive and conform to certain graduated standards during the next ten years. Mr. Carel Mulder, Acting Chief, Division of Medical Service of the Welfare Division of the Department of Health, Education and Welfare, stated in Philadelphia at the organization of State Medical Society Presidents on November 30th, 1965, that: "By July 1st, 1975, the law expects that Title XIX will furnish, throughout the nation, comprehensive care and services to substantially all medically needy individuals. The law permits continued payment of Federal funds to a State only if the Secretary is satisfied that the State is making efforts toward that 1975 goal by broadening the scope of the program and liberalizing its eligibility requirements."

This means that legislation will be needed in Alabama to activate the expansion of this program and this will require significant additional appropriation. Hospital services for Kerr-Mills patients are already set up on a

realistic per diem cost basis. Thus far, professional fees are not included in the program except for a couple of "house call" allowances. Since this tax supported Federal program will take care of indigent people of all ages, and since the classification of indigency is uncertain, physicians must adopt the same concept as hospitals, social workers, and all other groups—that of accepting compensation for service on a reasonable and customary fee basis, rather than contributing their services entirely or accepting a substandard token fee schedule. . . .

Medical and Paramedical Personnel

When Public Law 89-97 becomes active in July, 1966, there is almost certain to be a tremendous increase in the need for all types of medical facilities and personnel. More doctors will certainly be needed. The Medical Association, in cooperation with the Medical College of Alabama, successfully sponsored State legislation last summer to greatly improve the medical scholarship program in Alabama. This law created 60 scholarships of \$2,000 annually—52 being loan scholarships with optional repayment allowed by practice in the smaller towns of the State. The other eight scholarships are merit gift scholarships. Also the Legislature passed a \$10 million bond issue which will be used with Federal matching to expand the facilities of the Medical College of Alabama, so that it may take 100 students each year instead of 80 as at present—an increase of 25%. It seems likely that a second medical school will be required in Alabama within the near future. Long range plans for a medical school in Mobile are already being formulated.

The procurement of paramedical personnel has long been a major project of the Committee on Medical Education and Hospitals of the Medical Association of the State of Alabama under the Chairmanship of Doctor William Hawley. Working with the Health Careers Council of Alabama, this activity will be continued. A physician has been appointed in each county to act as Chairman or

Co-Chairman of a local Advisory Committee to the Health Careers Council.

State Health Department

At a special meeting of Counsellors and Delegates of the Medical Association in the Fall of 1964, President E. B. Glenn and Doctor Ira Myers forcefully presented the desperate plight of the State Health Department. Responding to this presentation of need, the Medical Association, acting as the State Board of Health, assigned top priority to correction of this situation by legislative action. The Association sponsored bills in the State Legislature to:

(1) Eliminate existing salary ceilings for professional personnel in the Health Department; and,

(2) Procure an additional \$2 million appropriation for satisfying some of the immediate needs of the Department of Health.

Both of these bills passed unanimously—the latter appropriation financed by a 1¢ per package cigarette tax.

Heart, Stroke, and Cancer Medical Program

In the summer of 1965, Congress passed initial legislation to finance some of the Heart, Stroke, and Cancer proposals of the much publicized DeBakey Report. On recommendation of the American Medical Association, a committee of the Medical Association of the State of Alabama was appointed under the Chairmanship of Doctor Tinsley Harrison to study these needs in Alabama and make recommendations as to how these needs could best be met. This Committee recommended that all such programs in Alabama should be centered in the Medical College, but should operate with the approval and guidance of the Medical Association and the State Board of Health.

In accordance with these recommendations, a State Advisory Medical Program Committee for the Heart, Stroke, and Cancer Medi-

(Continued on Page 271)



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PRESIDENT'S REPORT

(Continued from Page 269)

cal Program has just been appointed by Governor Wallace. . . . Under the Chairmanship of Doctor Joseph Reeves, this committee held its first meeting on April 9, 1966. The program for Alabama is still in the planning stage, but is expected to involve demonstrations, educational programs, and other methods for dissemination of information on the latest developments in relationship to heart, stroke, and cancer. These programs will be centered in the Medical College. No patient care is involved—only an educational program.

Ethics

Ours is a profession which is dedicated to the service of mankind and is founded upon the practice of the best in ethical principles. We need to pursue ethical conduct not because of fear of reprisal, but for the sheer joy of being ethical. It is a positive force in our motivation—not a negative one.

Not only are we obligated to remain ethical ourselves, but we must see that our colleagues do also. This means that County Medical Societies, as does the State Association, should have functioning Grievance or Mediation Committees for review of ethical complaints. Although ethical physicians are thoroughly dedicated to the right to an appropriate fee for service rendered, the charging of excessive fees is definitely unethical. County Medical Societies should establish Fee Review Committees to look into instances of alleged excessive fees. . . .

Recommendations

1. There is a great need for more active cooperation between the component County Medical Societies and the Medical Association of the State. It is urged that County Societies establish committees to conform with the major committees of the State Association to initiate proposals and help carry out the Association policy at the grass roots. . . .

2. The Medical Association urgently needs its own legal counsel, either on a full-time or retainer basis. It is strongly recommended that legal counsel be obtained promptly, within available funds if possible, but if not, a dues increase for this purpose should be authorized.

3. . . . It is recommended that a Standing Committee on Medicine and Religion be established by ordinance.

4. It is extremely important that the State Medical Association and the County Medical Societies strive to maintain harmonious relationship with other professional organizations who also are interested in service to the public. . . .

5. The American Medical Association is a voluntary Association of State and territorial medical associations which is governed by the House of Delegates selected from the constituent Associations. It is thoroughly democratic and representative of the medical profession of the United States of America. As such, it speaks for medicine in this country and deserves the support of every member of the Medical Association. . . .

6. President Johnson has made it very clear that he does not intend for "Medicare" to stop with provision of medical care for those over 65 years of age. His administration, the labor forces of the United States, COPE, and all the social planners of the Great Society will press for more and more socialized medicine. The only method to stop this socialistic trend is by a change of the persons elected to Congress. This can only be done if the physicians of America will unite with leaders of business and other professional groups in giving significantly of **money** and **time** to assure the election of conservative Senators and Congressmen. As such, your contributions to ALAPAC are heartily recommended.

It has been an honor to serve as President of the Medical Association of the State of Alabama.

SALIVARY GLAND STUDY UNDERWAY AT UNIVERSITY MEDICAL CENTER

By Gloria Goldstein

A unique and comprehensive investigation of the function and structure of the salivary glands is now underway at the University of Alabama Medical Center. Perhaps the largest program of its kind in the country, the investigation involves visiting fellows from several foreign countries, working with some ten senior scientists representing six basic science disciplines (physiology, pharmacology, anatomy and histology, biochemistry, microbiology, pathology) and at least two clinical disciplines (oral surgery and preventive dentistry). The investigators are working independently, but the overall project is under the direction of Dr. Leon Schneyer, a career awardee of the National Institute of Dental Research.

It is anticipated that light will be shed on the formation and normal functions of the salivary secretions, as well as on pathological aspects which may be of immediate importance in patient care.

Studying the formation of the secretions, Dr. Schneyer is proceeding on the theory that a primary event in the formation of saliva is the occurrence of an increase in permeability, or "leakiness" of the gland cells when they are stimulated. He believes the membrane surrounding the cell becomes leaky, permitting a flow of positive potassium ions and water—the beginnings of saliva. His investigations employ a specially constructed instrument which enables him to puncture the cell with a glass tube. A similar glass tube outside the cell allows a comparison of electrical charges inside and outside the cell. The electrical forces are important in determining the distribution of salt into the saliva, and hence its formation.

A unique way of studying the role of nerve activity in regulating functional and structural characteristics of the salivary glands

has been provided by the use of an exclusive liquid diet. The liquid diet, with its concomitant reduction of masticatory activity, produced a marked reduction in reflexly-induced flow of saliva. It has been found in laboratory animals that the reduction in activity caused by a diet of liquid Metrecal,



Pure, uncontaminated secretions from the parotid and submaxillary glands are collected by two suction devices and preserved in ice. Apparatus placed behind lower gum to collect submaxillary and sublingual secretions, called a segregator, was designed by Dr. Leon Schneyer. These studies have been based primarily upon saliva from patients given liquid diet for a period of time.

which is nutritionally adequate, leads to atrophy of the glands and reduction in flow of saliva and amount of digestive enzyme in the saliva. Preliminary studies in man indicate that similar reductions in saliva flow

(Continued on Page 275)

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in granules
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When combination antibiotic
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The rationale: When combined, Erythrocin and the trisulfapyrimidines (triple sulfas) are indicated in infections that are more susceptible to the combination than to either agent alone. Such conditions are usually found in urinary, lower respiratory tract and chronic ear conditions.

The results: Clinical studies involving 142 young patients showed *an overall cure rate of*

96.5%. Side effects were experienced by only four of the patients.

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ERYTHROMYCIN ETHYL SUCCINATE-TRISULFAPYRIMIDINES

In Chewable Tablets
In Granules for Oral Suspension



ERYTHROCIN-SULFAS

Brief Summary

Indications: Use Erythrocin-Sulfas in infections more susceptible to the combination than to either agent alone. These are usually found in urinary, lower respiratory tract, and chronic ear infections.

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or new born infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions: Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

If a reaction or overgrowth of nonsusceptible organisms occurs, withdraw the drug.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. each of sulfadiazine, sulfamerazine and sulfamethazine. 603303



SALIVARY GLAND STUDY

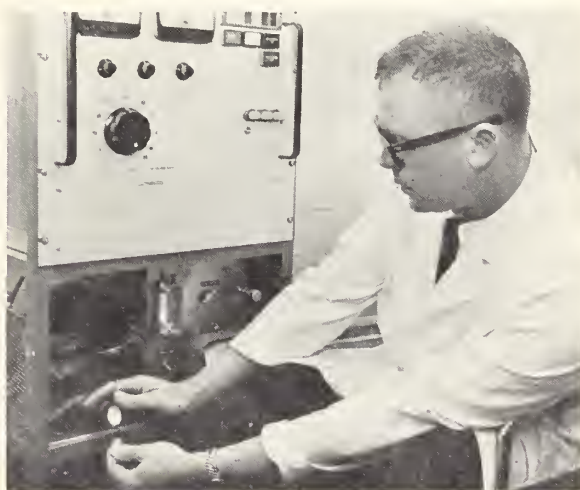
(Continued from Page 272)

and amount of digestive enzyme occur with the Metrecal diet. The researchers, Dr. H. D. Hall and Dr. Charlotte Schneyer, noted that the affected glands begin to function normally soon after solid foods are re-introduced to the diet. These findings indicate that the nervous system substantially controls the condition of the glands, and hence their activity. A possible clinical implication is that infected salivary glands may heal faster when given a "rest" through a liquid diet.

An evaluation of the primary functions of salivary secretions has produced another interesting concept. Quite possibly, the most important purpose of the secretions is to protect the tissues of the mouth and teeth, since normal digestion can indeed take place in the absence of saliva. However, a marked breakdown in tissues of the oral cavity has been noted when salivation is prevented.

Various diseases involving the salivary glands are being studied. For example, such diseases as mumps and cystic fibrosis affect

(Continued on Page 276)



Dr. John Shackleford, Assistant Professor of Anatomy, changes target material of specially designed and constructed X-ray machine to produce a desired X-ray wave length. Such materials as carbon, magnesium, aluminum and titanium are interchangeable for targets to produce different X-ray exposure, and thus different views of tissue specimen. Use of soft X-rays has enabled Dr. Shackleford to identify manifestations of diseased gland tissue in cystic fibrosis patients.

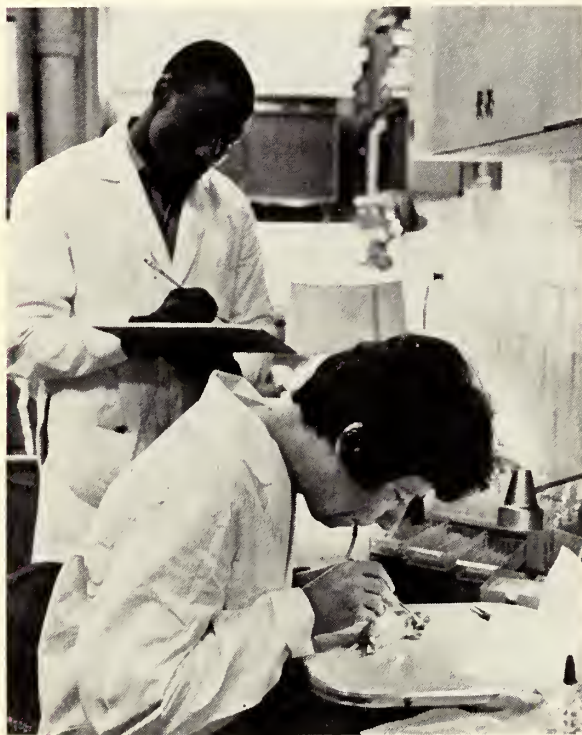
SALIVARY GLAND STUDY

(Continued from Page 275)

these glands, and an elucidation of the disease states is being sought.

Under comprehensive investigation are some manifestations of cystic fibrosis, a usually fatal disease occurring in one of every thousand live births. Using a specially designed X-ray machine which employs soft X-rays, Dr. John Shackelford can determine which gland cells secrete an abnormally viscous mucus. The thick mucus interferes with normal function of certain tissues, particularly the pancreas and salivary glands. Dr. Shackelford finds that one of the ways in which the thick mucus impairs function is by plugging up the ducts of these digestive glands.

Another of the many projects involved in the total salivary study is concerned with remineralization properties of saliva, as they affect the progress or possible repair of den-



Dr. Charlotte Schneyer, Associate Professor of Physiology, extracts salivary secretions directly from the gland ducts of research animal. This test measures the rate at which saliva is being produced. Later it can be analyzed for chemical composition. Animals are sometimes fed special diets to observe effects upon gland secretions. Research technician Herman Forrest assists Dr. Schneyer in investigations.



Dr. Leon Schneyer, Professor of Physiology, uses specially-designed apparatus on anesthetized rat to puncture cells in the salivary gland for electrical measurements.

tal caries. Dr. T. Koulourides, principal investigator in the study, found evidence that remineralization often occurs soon after the initiation of caries, at the stage when they are undetectable by the dentist. Apparently individuals have varying amounts of remineralization capabilities. Studies indicate that certain specially-developed mouthwashes, or fluorides mixed with saliva can enhance the remineralization process. Better ways of preventing caries should result from the investigations.

Eisenhower Honorary President Of International Eye Foundation

WASHINGTON—Gen. Dwight D. Eisenhower will serve as honorary president of the board of directors of the newly-formed International Eye Foundation, it was announced by Dr. J. Harry King, Jr., the foundation's medical director. The IEF, which will operate under Care-Medico, will direct and administer the world famous International Eye Bank.

LEGISLATURE PRAISES TWO MEDICAL LEADERS

The following resolution was unanimously adopted by both houses of the Legislature of Alabama, designating the new Health Research Facilities Building of the University of Alabama Medical Center at Birmingham as the "Lyons-Harrison Research Building" in memory of Dr. Champ Lyons and in honor of Dr. Rinsley R. Harrison, two outstanding Alabama physicians.

Text of the Resolution follows:

WHEREAS, the University of Alabama recently completed a Health Research Facilities Building in its Medical Center in Birmingham spanning Seventh Avenue and joining University Hospitals and Clinics with the Basic Science Building, and have under construction a substantial addition to the south end of this building, which facility, when completed, will constitute one of the most modern and complete health research facilities in the South; and

WHEREAS, President Frank A. Rose and the members of the Board of Trustees of the University of Alabama have requested that this building be named the "Lyons-Harrison Research Building" in memory of Dr. Champ Lyons and in honor of Dr. Tinsley Randolph Harrison; and

WHEREAS, Dr. Champ Lyons served for fifteen years as Professor and Chairman of the Department of Surgery of the Medical College of Alabama, leading the University of Alabama Medical Center in the development of its Department of Surgery to the highest standard of excellence and demonstrating the highest skill as a surgeon and teacher. The untimely death of Dr. Lyons, on October 25, 1965, was a great loss to the State of Alabama. His career was marked with monumental contributions.

WHEREAS, Dr. Tinsley Randolph Harrison came to the Medical College of Alabama as Professor and Chairman of the Department of Medicine in 1950, serving as Chairman of the Department until 1957 when he

relinquished his administrative duties for full time teaching and research, and having brought much honor and prestige to the Department of Medicine as a distinguished teacher, contributor to research, author of a standard textbook in internal medicine, and skilled practitioner in internal medicine; and

WHEREAS, both of these distinguished physicians are native Alabamians who, after achieving pre-eminence in their fields, returned to their native State to play a prominent part in the building of one of the great Medical Centers of America;

NOW, THEREFORE, BE IT RESOLVED by the Legislature of Alabama, both houses thereof concurring, that the Health Research Facilities Building of the University of Alabama Medical Center at Birmingham be named the "Lyons-Harrison Research Building" in memory of Dr. Champ Lyons and in honor of Dr. Tinsley Randolph Harrison and that such name be appropriately inscribed on or affixed to the building in such manner as the governing authorities of the institution may direct.

Eggs Used To Lower Blood Cholesterol Levels

A maximum of 4 eggs per week, including those used in cooking, may be ingested in diets that seek to lower blood cholesterol levels. Dr. Helen B. Brown and associates from the Cleveland Clinic investigated how much cholesterol can be consumed without nullifying the cholesterol-lowering effects of a diet high in polyunsaturated fats. Studies were made with 50 healthy persons fed various cholesterol-lowering diets rich in vegetable oils together with differing daily rations of eggs.—GP, December, p. 140.

DECLARATION OF HELSINKI IMPORTANT TO PHYSICIANS

The following is published for the information of all physicians at the request of the Reference Committee on Amendments to the Constitution and By-Laws of the American Medical Association.

Report Of The Judicial Council

Report A
(A-66)

Subject: Declaration of Helsinki

Presented by: E. G. Shelley, M. D., Vice
Chairman

Referred to: Reference Committee on Amend-
ments to Constitution and Bylaws
(Philip H. Jones, M. D., Chairman)

During the past several years, the American Medical Association has given much attention to the subject of ethical guidelines for clinical medical investigation. A number of meetings have been held at which representatives of the Association and other organizations, such as the American Federation for Clinical Research, the American Society for Clinical Investigation, the Central Society for Clinical Research, and the American College of Physicians, have discussed the desirability of adopting guidelines or standards or rules for clinical medical investigation. It is the consensus of knowledgeable individuals in this field that guidelines for medical clinical investigation should be developed and promulgated. It is the further thinking of these individuals, and the Judicial Council concurs in this thinking, that the Declaration of Helsinki adopted by the World Medical Association in 1954 is the expression of basic principles to which all honorable physicians and investigators can subscribe and may be accepted as guides to ethical conduct in medical investigation.

The Judicial Council has reviewed the Declaration of Helsinki and is of the opinion that it is in accord with the Principles of Medical Ethics of the American Medical As-

sociation. The Judicial Council, therefore, submits this Declaration to the House of Delegates with the recommendation that the House of Delegates endorse the Declaration of Helsinki as a guide to those who are engaged in clinical medical investigation.

Recommendations Guiding Doctors In Clinical Research

It is the mission of the doctor to safeguard the health of the people. His knowledge and conscience are dedicated to the fulfillment of this mission. The Declaration of Geneva of the World Medical Association binds the doctor with the words: "The health of my patient will be my first consideration" and the International Code of Medical Ethics declares that "Any act or advice which could weaken physical or mental resistance of a human being may be used only in his interest." Because it is essential that the results of laboratory experiments be applied to human beings to further scientific knowledge and to help suffering humanity, the World Medical Association has prepared the following recommendations as a guide to each doctor in clinical research. It must be stressed that the standards as drafted are only a guide to physicians all over the world. Doctors are not relieved from criminal, civil and ethical responsibilities under the laws of their own countries.

In the field of clinical research a fundamental distinction must be recognized between clinical research in which the aim is essentially therapeutic for a patient, and the clinical research, the essential object of which is purely scientific and without therapeutic value to the person subjected to the research.

I. Basic Principles

1. Clinical research must conform to the moral and scientific principles that jus-

(Continued on Page 280)

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CANTIL[®] (mepenzolate bromide)

helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function... Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects... Urinary retention, noted in two cases was eliminated in one by reducing dosage."¹

IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withdraw in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1. Riese, J. A.; Amer. J. Gastroent. 28:541 (Nov.) 1957

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DECLARATION OF HELSINKI

(Continued from Page 278)

tify medical research and should be based on laboratory and animal experiments or other scientifically established facts.

2. Clinical research should be conducted only by scientifically qualified persons and under the supervision of a qualified medical man.
3. Clinical research cannot legitimately be carried out unless the importance of the objective is in proportion to the inherent risk to the subject.
4. Every clinical research project should be preceded by careful assessment of inherent risks in comparison to foreseeable benefits to the subject or to others.
5. Special caution should be exercised by the doctor in performing clinical research in which the personality of the subject is liable to be altered by drugs or experimental procedure.

II. Clinical Research Combined with Professional Care

1. In the treatment of the sick person, the doctor must be free to use a new therapeutic measure, if in his judgment it offers hope of saving life, re-establishing, or alleviating suffering. If at all possible, consistent with patient psychology, the doctor should obtain the patient's freely given consent after the patient has been given a full explanation. In case of legal incapacity, consent should also be procured from the legal guardian; in case of physical incapacity, the permission of the legal guardian replaces that of the patient.

2. The doctor can combine clinical research with professional care, the objective being the acquisition of new medical knowledge, only to the extent that clinical research is justified by its therapeutic value for the patient.

III. Non-Therapeutic Clinical Research

1. In the purely scientific application of clinical research carried out on a human being, it is the duty of the doctor to remain the protector of the life and health of that person on whom clinical research is being carried out.
2. The nature, the purpose and the risk of clinical research must be explained to the subject by the doctor.
- 3a. Clinical research on a human being cannot be undertaken without his free consent after he has been informed; if he is legally incompetent, the consent of the legal guardian should be procured.
- 3b. The subject of clinical research should be in such a mental, physical and legal state as to be able to exercise fully his power of choice.
- 3c. Consent should, as a rule, be obtained in writing. However, the responsibility for clinical research always remains with the research worker; it never falls on the subject even after consent is obtained.
- 4a. The investigator must respect the right of each individual to safeguard his personal integrity, especially if the subject is in a dependent relationship to the investigator.
- 4b. At any time during the course of clinical research the subject or his guardian should be free to withdraw permission for research to be continued. The investigator or the investigating team should discontinue the research if, in his or their judgment, it may, if continued, be harmful to the individual.

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Standardized cellulolytic* enzyme, 2 mg.;
Standardized amylolytic enzyme, 15 mg.;
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Pancreatin 3X** (source of lipolytic activity),
100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established.

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GAS



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Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

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THE PHYSICIAN AND TRAFFIC SAFETY

James C. Upchurch, M. D.*

A renaissance has begun in the field of traffic safety. Everyone from the private citizen through big industry and the United States Congress is "up-in-arms" about our traffic deaths, injuries and financial loss. In 1965 the physical measurable property damage loss resulting from vehicle accidents exceeded *eight billion* dollars. In Alabama the measurable damage amounted to one hundred eighty million dollars. Since 1900, we have killed over 1,000,000 persons on our highways, countless millions have been injured—many of these permanently. Nearly fifty thousand lives were lost in traffic accidents in the United States in 1965 with Alabama contributing one thousand deaths to that frightening statistic.

The National Safety Council estimates that there are approximately 84,000,000 registered motor vehicles in this country. By 1970 there will be an estimated 112 million licensed drivers, and travel mileage at that time will be at the rate of a trillion miles a year. The number of licensed drivers in Alabama is approximately 1,500,000, and the number of registered vehicles as of September 30, 1965, was 1,634,278. By 1975, 700,000 more Americans—our families, friends and business associates—will meet death on the highways. If the present rate of accidents continues, one out of two children born today will be injured or killed in a traffic accident. One out of every five drivers will be involved in a fatal accident or property damage accident during the current year.

Many millions of dollars to further traffic safety will be available soon from the Fed-

eral Government on a matching basis. This money will be allotted only to those states and their respective municipalities who have certain specified traffic safety programs underway and functioning efficiently. Among these requirements are periodic motor vehicle inspection and driver education. Alabama has recently enacted into law a driver education program, but adequate funds for its development are absent. Such a small number of high school students in Alabama are taught an approved driver training course each year that this state ranks *last* in the nation. Furthermore, a bill for periodic motor vehicle inspection has failed to get past judicial committee evaluation. Nineteen states and the District of Columbia had statutory inspection by 1965, and these states showed a *fifty per cent* lower fatality rate than states without statutory inspection programs based on a death rate per 100,000 population. Based on a death rate per one hundred million miles, states with periodic motor vehicle inspection have approximately twenty per cent fewer fatalities than states without such laws! Those people who claim such programs breed graft and corruption cannot argue with the results. Applying these statistics to Alabama, approximately *two hundred* lives would be saved each year if this state had a periodic motor vehicle inspection program.

The proposed Alabama vehicle inspection bill would establish approximately two thousand state licensed private inspection stations—service stations, garages, etc. Examination would be required once yearly at two dollars per vehicle and would include the windshield, windshield wipers, brakes, exhaust system, electrical system, light beam adjustment and steering. Repair at the sta-

(Continued on Page 284)

*Member of the State Safety Coordinating Committee. Resident in Obstetrics and Gynecology at Lloyd Noland Hospital, Fairfield, Alabama. Student, Cumberland School of Law, Birmingham, Alabama.

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Each chewable tablet contains:
nicotinic acid (niacin) 75 mg. and
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Administration and Dosage: One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

Side effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

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TRAFFIC SAFETY

(Continued from Page 282)

tion of inspection would not be required. In a great many instances, the motorist would find that his favorite service station had been selected as a safety check station, or it might be a neighborhood repair shop which has a reputation for honest work at reasonable prices.

Of course, there are many other reasons for accidents other than improperly maintained automobiles. Approximately ten to fifteen per cent of traffic accidents are due to faulty vehicles, and most of the rest are due to the driver, with a few accidents being attributable to the streets and roads themselves. Highway engineering, law enforcement, driver license laws, and many other things must improve in future years to help decrease highway catastrophies.

In order to help combat rising traffic fatalities, the Alabama Legislature established the State Safety Coordinating Committee in April, 1963. Members of this Committee consisted of the Governor (as chairman), the Director of Public Safety, the Chief Justice of the Alabama Supreme Court, the State Toxicologist, the Attorney General, the Director of the State Highway Department, the Administrator of the Alcoholic Beverage Control Board, two state senators and two state representatives. Associate committeemen have been added by appointment to strengthen the Committee and increase its representation in all aspects of traffic safety. The group meets regularly upon the call of the Governor for the purpose of exploring every facet of the complex problem of traffic safety, to identify major highway and traffic problems, to formulate concrete plans of action to meet these needs, and coordinate the separate safety programs adopted by officials of the state, county and municipal governments. The Committee is charged by law to study specifically the problems of interstate and intrastate highway safety and from time to time make recommendations to the legislature for the enactment of acts designed to

promote improvement in existing programs of highway safety. Since its conception, the State Safety Coordinating Committee has worked long and hard toward its goals and has held a Governor's Traffic Safety Conference annually in Montgomery attended by traffic safety workers from throughout the State. This Committee sponsored the legislation for driver education and is currently sponsoring a bill for periodic motor vehicle inspection.

The State Safety Coordinating Committee played an integral part in establishing the current Medical Advisory Committee to the Department of Public Safety. This group is made up of five physicians who are anonymous and unpaid and serve specifically to advise the Driver License Division. Over one thousand driving examinations are given in Alabama each day, and some of the examinees exhibit mental or physical problems which cause the examining officer some concern. He then will notify the Director of the Driver License Division of his findings. The Director will send certain correspondence to the examinee which requires a complete examination at his own expense and by the doctor of his choice. The private physician fills out a special form furnished in the previously mentioned correspondence and is asked only to state the examination findings. No opinion of the patient's driving ability is requested but is welcomed if the physician desires to include this in his report. This report is sent directly to the Driver License Division by the examining doctor. Copies of this examination, in addition to any other information in the examinee's file, is sent to each member of the advisory group where it is carefully reviewed. Decisions by the physicians are then reviewed by the department director, and he makes the final decree for or against licensure. All forms used by the Committee have been corrected and approved by the Attorney General's office. No discussion will be attempted in this paper as to how these decisions are reached. Admittedly, criteria for such decisions are non-existent.

(Continued on Page 286)

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In fact, there's as much iron...250 mg.
...in a 5 cc. ampul of Imferon (iron dextran
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When iron deficient patients are intolerant
of oral iron...or orally administered iron
proves ineffective or impractical...or if
the patient cannot be relied upon to take oral
iron as prescribed, Imferon (iron dextran
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and rapidly replenishes iron reserves.

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IN BRIEF: ACTION AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses. Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

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TRAFFIC SAFETY

(Continued from Page 284)

but these physicians call upon their experience, their logic, the information before them, and certain published guides. "The Proceedings of the National Conference on Medical Aspects of Driver Licensing, 1964" and "The Medical Guide for Physicians in Determining Fitness to Drive a Motor Vehicle" are used most frequently. The Code of Alabama, Title 36, Section 66, specifically prohibits licensure to alcoholics, narcotic addicts, persons adjudged insane, idiots, imbeciles, epileptics and the feeble-minded. The Committee, of course, must make their decisions within the law, but conversely, the law helps to make the decision very infrequently. The Department of Public Safety will allow epileptics to drive if they have been seizure free for two years.

The Medical Advisory Committee has been sanctioned and approved by the Medical Association of the State of Alabama, the State Safety Coordinating Committee, and the Department of Public Health. It has been functioning for one year and has processed approximately one hundred fifty cases with

about fifty per cent of the examinees being qualified. The Governor and the Director of the Department of Public Safety have personally and officially expressed appreciation to the Committee for their efforts.

In summary, one can say that Alabama cannot be proud of its traffic safety record. Finally, however, the majority of the citizenry is stirred by this record and great strides toward safer highways are being made. Many Alabama physicians have added the furtherance of traffic safety to their busy schedules. The physician is a community leader, and his influence can be a major factor in eliminating public apathy toward the loss of lives and property in automobile accidents. Far reaching legislation in the area of traffic safety is being considered and the physician should, and must, exert his knowledge and influence such that this needed legislation can better accomplish its purposes.

I would like to express my appreciation to Mr. Austin Hayes of the Alabama Department of Public Health for his statistical information and to Lieutenant B. W. Higgins of the Alabama Department of Public Safety for information on the Medical Advisory Committee.

Southeastern Internists Schedule Scientific Meeting

The American College of Physicians (ACP) will hold a scientific meeting for internal medicine specialists in its Southeastern Region on October 7-8.

The meeting will be held at the Buena Vista Hotel-Motel in Biloxi, Miss., for doctors in Alabama, Florida, Georgia, Louisiana, Mississippi and South Carolina.

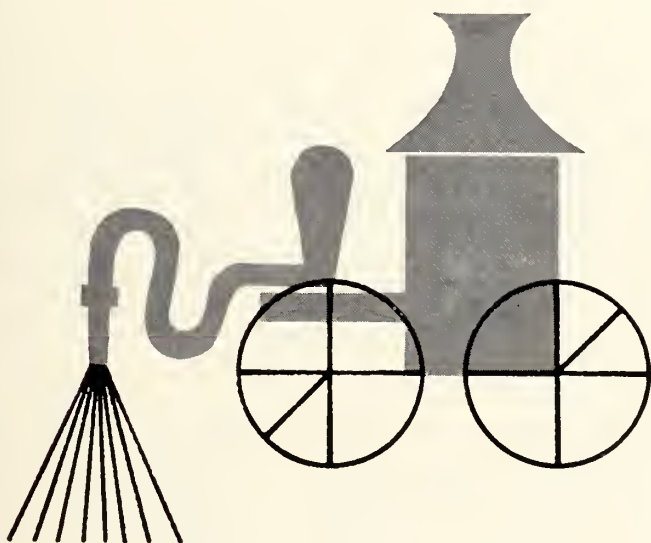
The regional meeting is one of the 30 scientific sessions sponsored each year by the ACP throughout the United States and Canada and in the Far East. It serves to help keep College members abreast of developments in the basic sciences and clinical medi-

cine. The ACP represents some 13,000 specialists in internal medicine and related fields.

Irving S. Wright, M. D., New York, N. Y., ACP President and Professor of Clinical Medicine at Cornell University Medical College, will be a special guest.

The meeting is under the general direction of a committee of governors with Wesley W. Lake, Sr., M. D., of Pass Christian, Miss., ACP Governor for Mississippi and Associate in Medicine at Tulane University School of Medicine as host Governor.

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COUNTY SOCIETIES MEET

BALDWIN COUNTY

Dr. John Lyden delivered a program on "Ilio-femoral Vein Thrombosis" to the Baldwin County Medical Society at its meeting Aug. 2 at the Thunderbird Inn. The routine business meeting was followed by a social meeting. The Baldwin County Society will next meet in October on a date yet to be decided.

CLAY COUNTY

The Clay County Medical Society was addressed by Dr. J. D. Rayfield, County Health Officer, at its July 6 meeting. Dr. Rayfield spoke on the Home Health Society. Also on the program were two films—"Diabetes in the Youth" and "Rescuetatin Birth." Dr. George Smith was elected as a new member to the county society. The next meeting was set for July 26 at noon at the Clay County Hospital.

COFFEE COUNTY

The regular monthly meeting of the Coffee County Medical Society was held Aug. 4 at Gibson Hospital. Dr. A. R. Pappas showed a film on Thyroid deficiency. The next meeting will be at 7 p. m. in Elba on Sept. 1, when Dr. James Stanley will give the program.

LAUDERDALE COUNTY

The Lauderdale County Medical Society meeting was held July 11 at the Eliza Coffee Hospital. Thirty members were present at the business meeting. The next meeting will be Aug. 8, 7:30 p. m., ECM Hospital in Florence.

RANDOLPH COUNTY

Dr. Robert Vaughan, thoracic surgeon from Columbus, Ga., delivered the program for the July 7 meeting of the Randolph County Medical Society. Dr. Vaughan's topic was "Emergencies of the Chest." The August meeting of the Randolph society was scheduled for 6 p. m., Aug. 4 at the Randolph County Hospital.

SHELBY COUNTY

The Medical Society of Shelby County met July 11, at Shelby Memorial Hospital. Dr. Marshall Pitts gave the program on a patient with hydrocolpos. Dr. Charles Curtis of Calera was elected as a new member to the county society. The next meeting will be Aug. 1, 8:00 p. m., in Alabaster at the Shelby Memorial Hospital.

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190
102

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Alabama Department of Public Health



Twenty Years Of Hill-Burton Program

Since the beginning of the Hill-Burton Program in 1946, federal funds totaling \$87,653,-768 have been made available in Alabama and have stimulated the construction of 296 health facility projects in the state costing a total of \$158,814,000. This construction has provided Alabama with an additional 8,694 inpatient beds in hospitals and nursing homes and has added 127 other types of health facilities.

The Hill-Burton Program was initiated when President Truman signed the Hospital Survey and Construction Act on August 13, 1946. The legislation authorized federal grants to assist states and communities in constructing needed hospitals and public health centers to furnish adequate care to all their people. The Hill-Burton Program was founded, and continues to operate, on the philosophy that government and voluntary groups must work together to maintain and improve the health of our people. The partnership based on this philosophy has included federal, state, and community governmental units on one hand, and hospitals, voluntary health and hospital associations, and citizens' groups on the other.

Two decades of Hill-Burton in Alabama find this state on the threshold of having the most nearly adequate hospital and nursing home facilities in the nation. This is a decided change from the situation which existed prior to the inception of the Hill-Burton Program.

A survey of existing hospital facilities in Alabama in September of 1947 revealed that only 118 general hospitals existed with a bed

capacity of 6,411. Not but 4,804 of these existing beds were acceptable. Fifteen counties having a total population of 277,844 out of Alabama's 67 counties had no hospital facilities. Thirty-three counties with a population of 783,500 had no acceptable general hospital beds. Forty-seven counties needed additional hospital beds. Only five counties with a total population of 150,016 had adequate facilities. Hospital facilities to treat tuberculosis patients and mental illnesses were very inadequate. After all tabulations were made it was revealed that 7,473 additional hospital beds, above the 4,804 existing acceptable beds, were needed in Alabama for a total of 12,277 general hospital beds.

The first three years of the Hill-Burton Program in Alabama brought a tremendous improvement in the quality and quantity of hospital facilities. By the end of 1950 half as many acceptable general hospital beds were provided for Alabama's sick and injured as the State had at the time the Hill-Burton Act became operable in 1947. The number of Alabama counties without acceptable hospital beds was reduced from 33 to 18.

At this point Alabama was receiving a "lion's" share of the federal funds appropriated for hospital construction. In March of 1950 she lead every other Southeastern state in funds received under the Hill-Burton Hospital Act. Alabama hospital and health centers completed or under construction had received approximately \$7,100,000 in federal aid.

In 1945 the Hill-Burton Act was amended

(Continued on Page 296)

DORSEY

summer 1966

Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.



this issue: emergency anesthesia and the common cold

When emergency anesthesia is complicated by the common cold

Barry Belonsky, M.D., F.A.C.A.

Staff Anesthesiologist, Hospital of The Albert Einstein College of Medicine, New York City



Medical facilities are often presented with unfamiliar patients who have unknown health histories. This is particularly true in emergency situations that arise due to accidents or acute illnesses. These cases may need prompt care requiring anesthesia, and if they involve colds, nasal allergies or other upper respiratory infections, can account for many complications which make up a major hazard during emergency anesthesia.

Administration of general anesthesia to a patient with a cold or upper respiratory infection is a hazardous undertaking. It should be avoided if at all possible. Indeed, the presence of U.R.I. is good reason for postponement of elective surgery.¹ In emergency surgery, regional or local block should be considered, but if general anesthesia is mandatory, it should be approached with utmost caution.

Since the attitude of "emergency surgery — hurry" has been replaced by "emergency surgery — watch out",² a knowledge of the complications is a great help in preventing them. Here is a brief outline of the problems involved and their treatment. Prevention of the complications is discussed later.

Complications during the induction of anesthesia Most of the complications are a direct result of secretions and some a result of accompanying secondary infection. For example, *airway obstruction* due to excessive secretions occurs very commonly and is the direct effect of the cold. Respiratory exchange may be obstructed at any time during anesthesia because of excessive secretions, but is most likely to occur during induction. Suction apparatus must be available to overcome this.³

Excess secretions which stimulate and irritate the epiglottis and vocal chords can cause *laryngeal stridor and obstruction*. This can lead to complete laryngeal closure with resultant anoxia and death.

Bronchospasm and laryngospasm can result from secretions penetrating the bronchi and bronchioles. In laryngospasm, there are both inspiratory and expiratory stridor and difficulty in inflating the chest. In bronchospasm there is an expiratory wheeze, but not as much difficulty in inflation, although some resistance may be felt. Stridor is due to partial or complete closure of the vocal cords in spasm and the "crowing" sound is almost pathognomonic.

Secretions obstruct the nasal airways. This produces *difficulty in ventilation* through the mouth until the patient is deep enough to place an oral airway. An intravenous agent can be given to facilitate the induction of anesthesia.

Difficulties can arise if intubation is performed before the patient is ventilated. For example, teeth can be broken by too vigorous attempts at intubation, the intubation itself may be technically difficult due to secretions obstructing the view of the glottis. The postoperative sequelae of intubation ranges from mild laryngitis to pneumonia with atelectasis, and are seen far more commonly in patients suffering from colds than in normal patients.



Successive stages of laryngospasm which produce the characteristic stridor or "crowing" sound.



Progression of
bronchioles into bronchospasm.

Complications during the maintenance of anesthesia *Bronchospasm* can occur in an intubated patient due to secretions entering the bronchial tree from above, and acting as an irritant to the bronchi and bronchioles. Secretions accumulate quickly and the patient has to be suctioned continually. The whole cycle of coughing, bucking, laryngospasm and bronchospasm may ensue. The difficult decision here is whether it is better to suction the patient continually or to use an endotracheal tube which protects the cords and bronchi but introduces the risk of attendant complications.

Postoperative complications Postoperatively, complications can be more serious than even the intra-anesthesia complications, and occur much more frequently in a patient who has been intubated.⁴

Rhinitis and pharyngitis can result both from the postoperative upper respiratory infection and from the drying of the mucous membranes which occurs during anesthesia.

Tracheitis and bronchitis often result from secretions trickling down the tracheobronchial tree.

Pharyngitis is frequently seen in patients with upper respiratory infections who have been intubated. There is a significant increase in the incidence of pharyngitis compared to that in patients without upper respiratory infections.

Glottic edema is a condition which occurs mainly in children who have been intubated. This pathology results from an exudate developing in the areolar tissue just below the cords. Because of the small size of the child's trachea, even a 1 mm increase in

size of the mucous membrane can severely impair the air passage. Children exhibit this by severe expiratory stridor and may even become cyanotic. This may so severely embarrass the child's breathing that it must be treated vigorously. Most authorities agree on the treatment^{5,6,7,8} consisting of a high oxygen concentration in the inspired air (60%), plus high humidity (close to 100%). Adequate parenteral fluid intake and slight cooling of the body temperature (by a cooled oxygen tent) also help in mild cases. In severe cases, there may be hypoxia which increases the restlessness and the oxygen demand rises. Sedation is often necessary, although concomitant depression of the respiratory center is undesirable. An antihistaminic accomplishes this purpose well, and adds sedation. Since there is always a possibility that an allergic response plays a role in edema, some relief of the respiratory distress may occur. Steroids should be used to control inflammatory and allergic phenomena and swelling. If all this fails, and the patient is still restless and hypoxic, a tracheostomy should be performed immediately.

(concluded on following page)



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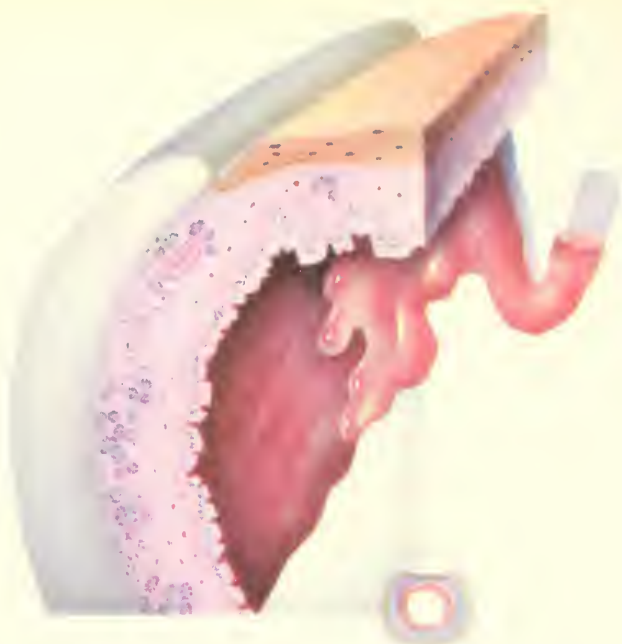
One tablet goes a long way. For 24 hour relief of nasal congestion and postnasal drip due to sinusitis, colds and respiratory allergies—simply prescribe one Triaminic timed-release tablet, swallowed whole, in morning, mid-afternoon and at bedtime.

Side Effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness, or gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

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Phenylpropanolamine hydrochloride	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

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Cross section of trachea showing subglottic edema and lumen reduction due to mucous membrane congestion.

Pneumonia may also follow anesthesia administered to a patient with a cold. This can be caused by accumulated secretions becoming secondarily infected and causing consolidation of the lung. *Atelectasis* of the lung can result if one of the bronchioles becomes plugged by secretions, preventing aeration of the distal part of that lung. This is seen more frequently following upper respiratory infection because dry anesthetic gases aggravate the infection, causing secretions to change from watery to thick and viscid, and consequently difficult to suction.

Prevention of complications The first rule to prevent complications, of course, is to use a regional or local anesthesia whenever possible. But when emergency surgery is a must, in spite of the presence of a cold, allergy, or upper respiratory infection, here are some ways to prevent complications.

Give nose drops preoperatively. This can help shrink the congested nasal mucous membranes and reduce secretions for better air passage. (Results of this method are sometimes unsatisfactory because of the short duration of effect or rebound congestion.) For longer effect, oral antihistamines with nasal decongestants are often given to provide and maintain a drying effect on secretions.

To clear the tracheobronchial tree, instruct the patient to cough preoperatively. Cold steam or water nebulizers effectively humidify the nasal, pharyngeal and bronchial passages and often make the patient more comfortable. Tenacious secretions be-

come more watery under humidification, clear more thoroughly preoperatively and are more easily suctioned from the airway during anesthesia.

Give intravenous fluids to those patients who appear dehydrated due to a cold. In a well hydrated patient the respiratory tract secretions are less viscid and more watery. This is particularly true in asthmatic

Summary: Administration of emergency anesthesia to a patient with a cold or upper respiratory infection can lead to a chain of events that may result in increased postoperative morbidity and even death. This is because of the excess secretions formed in these conditions. Preoperative measures to prevent or reduce these secretions should be undertaken and will result in smoother and safer anesthesia.

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Administer every four hours. **Side effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness, gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertensive heart disease, diabetes or thyrotoxicosis.

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PUBLIC HEALTH

(Continued from Page 290)

to include nursing homes, diagnostic and treatment centers, rehabilitation facilities, and chronic disease facilities. Only 595 of the 2,049 nursing home beds in Alabama were acceptable for use in this year. An assessment of the State's facilities revealed a need for 5,483 additional nursing home beds; 5,145 general hospital beds; 2,458 TB sanatoria beds; 11,679 mental hospital beds; and 6,200 chronic disease beds.

As of October 1965 the number of general hospitals in Alabama had increased to 154 with a bed capacity of 13,612. Only two counties were without any general hospital facilities; only two counties had no acceptable hospital beds. In 1947 only 39.17 per cent of Alabama's general hospital beds need was being met; whereas, by October of 1965, 84.16 per cent of this need was being met.

Growth in the field of more adequate nursing home facilities has been tremendous throughout the state within the past 10 years. As of October 1965 nursing home beds in Alabama numbered 6,352. The per cent of need presently being met in this area is 53.7 per cent as opposed to 7.7 per cent in 1955.

Twenty years of the Hill-Burton program in Alabama have helped communities throughout Alabama meet the needs of its citizens for hospitals, public health centers, nursing homes, rehabilitation facilities, diagnostic and treatment centers, and other health facilities.

Backache In Pregnancy

During pregnancy, common backaches often can be relieved by limited physical activity and the wearing of low-heeled shoes, bed rest, heat and back support after the first three months' period, according to Dr. Jack D. Spankus of Milwaukee. He recommends placing a pillow under the knees and the painful area of the back. As soon as the pain disappears, posture exercise is advised to increase muscle tone of the back and abdomen.—*Med. World News*, Nov. 26, p. 12.

BUREAU OF VITAL STATISTICS PROVISIONAL BIRTH AND DEATH STATISTICS AND COMPARATIVE DATA

MAY 1966

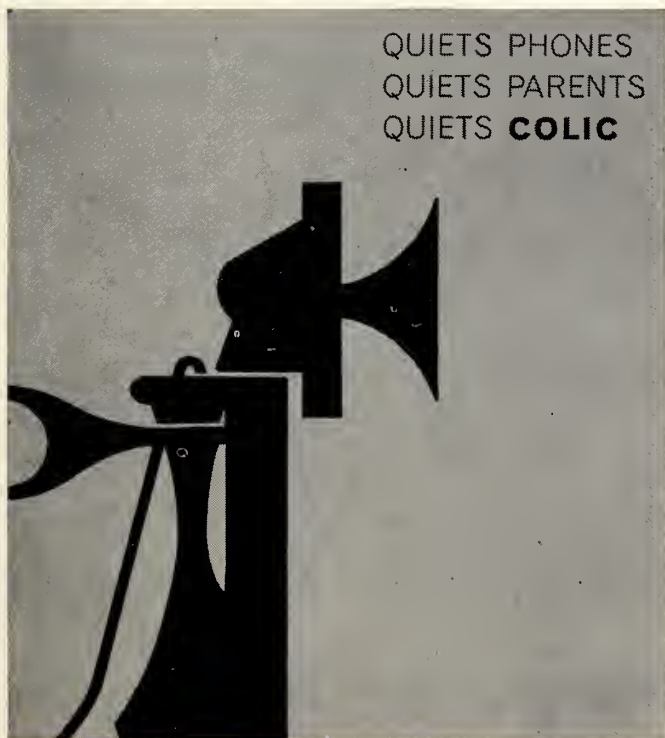
Ralph W. Roberts, M. S., Director

Live Births Deaths Causes of Death	Number Registered During May 1966			Rates* (Annual Basis)		
	Total	White	Non-White	1966	1965	1964
Live Births	4,934	3,331	1,603	26.5	18.4	19.5
Deaths	2,849	1,041	1,608	9.5	9.0	9.1
Fetal Deaths	106	39	67	21.0	23.8	21.8
Infant Deaths						
under one month	86	43	43	17.4	19.8	21.4
under one year	132	58	74	26.8	31.2	29.9
Maternal Deaths	4	2	2	7.9	1.8	8.7
Causes of Death						
Tuberculosis, 001-019	22	9	13	7.4	6.1	6.2
Syphilis, 020-029	3	1	2	1.0	1.4	1.0
Dysentery, 045-048					0.3	0.3
Diphtheria, 055						
Whooping cough, 056					0.3	0.3
Meningococcal infections, 057	1	1		0.3	0.7	0.7
Poliomyelitis, 080, 081						
Measles, 085					0.7	0.7
Malignant neoplasms, 140-205	404	290	114	135.1	111.6	117.5
Diabetes mellitus, 260	47	32	15	15.7	14.9	17.3
Pellagra, 281						
Vascular lesions of central nervous system, 330-334	413	248	165	138.1	129.6	116.5
Rheumatic fever, 400-402	1		1	0.3	0.7	0.7
Diseases of the heart, 410-443	967	702	265	323.3	301.1	314.1
Hypertension with heart disease, 440-443	104	44	60	34.8	43.6	45.1
Diseases of the arteries, 450-456	63	40	23	21.1	20.3	22.5
Influenza, 480-483	9	3	6	3.0	0.7	1.4
Pneumonia, all forms, 490-493	80	44	36	26.7	30.4	20.8
Bronchitis, 500-502	8	8		2.7	1.0	2.1
Appendicitis, 550-553	6	4	2	2.0	1.0	0.3
Intestinal obstruction and hernia, 560, 561, 570	15	9	6	5.0	5.1	3.8
Gastro-enteritis and colitis, under 2, 571.0, 764	7		7	2.3	2.4	1.0
Cirrhosis of liver, 581	19	16	3	6.4	5.8	4.8
Diseases of pregnancy and childbirth, 640-689	4	2	2	7.9	1.8	8.7
Congenital malformations, 750-759	23	18	5	4.7	4.0	7.5
Immaturity at birth, 774-776	27	15	12	5.5	5.5	6.9
Accidents, total, 800-962	196	129	67	65.5	67.3	70.4
Motor vehicle accidents, 810-835, 960	93	68	25	31.1	36.2	34.0
All other defined causes	374	214	160	125.0	130.2	122.0
Ill-defined and unknown causes, 780-793, 795	160	56	104	53.5	50.7	52.0

* Rates: Birth and death—per 1,000 population
Infant deaths—per 1,000 live births
Fetal deaths—per 1,000 deliveries
Maternal deaths—per 10,000 deliveries
Deaths from specified causes—per 100,000 population

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Pleasant-tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be given by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. It is contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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Indications: Chronic and acute rheumatoid arthritis, rheumatoid (ankylosing) spondylitis, degenerative joint disease (osteoarthritis) of the hip, and gout. **Contraindications:** Active peptic ulcer, gastritis, regional enteritis, or ulcerative colitis. Safety in pregnancy has not been established. Not recommended for pediatric age groups.

Warning: Patients who experience dizziness, lightheadedness, or feelings of detachment on INDOCIN should be cautioned against operating motor vehicles, machinery, climbing ladders, etc. Use cautiously in patients with psychiatric disturbances, epilepsy, or parkinsonism.

Precautions and Adverse Reactions: Most commonly, headache, dizziness, lightheadedness, G.I. disturbances. The C.N.S. effects are often transient and frequently disappear with continued treatment or reduced dosage. The severity of these effects may occasionally require cessation of therapy. G.I. effects may be minimized by giving the drug with food or with antacids or immediately after meals. Ulceration of the stomach, duodenum, or small intestine has been reported and, in a few instances, severe bleeding with perforation and death. Gastrointestinal bleeding with no obvious ulcer formation has also been noted; INDOCIN should be discontinued if G.I. bleeding occurs. As a result of G.I. bleeding, some patients may manifest anemia, and for this reason periodic hemoglobin determinations are recommended. Rare reports of effects not definitely known to be attributable to INDOCIN include bleeding from the sigmoid colon (either from a diverticulum or without a known previous pathologic condition), perforation of preexisting sigmoid lesions (diverticulum, carcinoma), and hematuria. In other rare cases, a diagnosis of gastritis has been made while the drug was being given. One patient developed ulcerative colitis, and another, regional ileitis, while receiving INDOCIN; when the drug was given to patients with preexisting ulcerative colitis, there was an increase in abdominal pain. Infrequently observed side effects may include drowsiness, tinnitus, mental confusion, depression and other psychic disturbances, blurred vision, stomatitis, pruritus, edema, and hypersensitivity reactions. Slight BUN elevation, usually transient, has been seen in some patients, although the preponderance of evidence indicates that INDOCIN does not adversely affect renal function, even in patients with preexisting renal disease. Nevertheless, renal function should be checked periodically in patients on long-term therapy. Leukopenia has been seen in a few patients. Transient elevations in alkaline phosphatase, cephalin-cholesterol flocculation, and thymol turbidity tests have been observed in some patients and, rarely, elevations of SGOT values; the relationship of these changes to the drug, if any, has not been established. As with any new drug, patients should be followed carefully to detect unusual manifestations of drug sensitivity. Before prescribing or administering, read product circular with package or available on request.

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director
Current Morbidity Statistics
1966

	June	July	*E. E. July
Tuberculosis	97	125	147
Syphilis	164	148	143
Gonorrhea	314	406	323
Chancroid	1	1	2
Typhoid fever	3	1	2
Undulant fever	0	1	0
Amebic dysentery	10	3	3
Scarlet fever & strep. throat	284	367	37
Diphtheria	1	1	1
Whooping cough	5	6	21
Meningitis	4	11	3
Tularemia	0	0	0
Tetanus	1	3	5
Poliomyelitis	0	1	4
Encephalitis	2	0	0
Smallpox	0	0	0
Measles	111	101	89
Chickenpox	47	43	14
Mumps	47	45	22
Infectious hepatitis	26	15	53
Typhus fever	0	0	0
Malaria	1	0	0
Cancer	572	686	654
Pellagra	0	1	0
Rheumatic fever	12	15	11
Rheumatic heart	20	16	25
Influenza	784	22	19
Pneumonia	215	282	114
Rabies—Human cases	0	0	0
Pos. animal heads	3	0	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph. D., Director
JULY 1966

Examination for Intestinal Parasites	1,433
Examination for Malaria	3
Salmonella & Shigella (blood-feces-urine)	351
Examination for tubercle bacilli	3,903
Examinations for gonococci	2,029
Serological tests for syphilis	28,384
FTA	42
Darkfield	1
Brucella	1
General Bacteriology (cultures for isolation and confirmation)	16
Staphylococcus (cultures for isolation and confirmation)	196
Examinations for diphtheria	26
Streptococci examinations	1,486
Mycology	19
Agglutinations	19
Vincent's Infection	0
Complement Fixation tests	81
Tests for Phenylketonuria (PKU)	5,298
Cytology	602
Water examinations	3,036
Milk and dairy products examinations	3,461
Sea food examinations	164
Examination for Negri bodies (smears & Animal inoculations)	370
Virology	5
Rh Factor	652
Miscellaneous	702
Total	52,280

Danger of Pierced Ear Lobes

Piercing of the ear lobes in order to wear earrings—the modern craze of teenage boys and girls—can have serious consequences and end with a disastrous “earmark,” warns Dr. Bradford Cannon of Boston. The lobe can become infected and atrophy; keloid scars may develop which are permanent; and “there is the serious danger that the ring through the lobe may become caught or grasped and torn loose from the ear, splitting the lobe from the perforation to its tip.” He notes that the word “earmark” derives its origin from the practice of notching, clipping or perforating the ears of sheep or cattle for purposes of identification.—*J.A.M.A.*, Jan. 17, 1966, p. 213.

Skin Cancer from Sun Exposure

Excessive exposure to the sun can cause skin cancer in black- or brown-eyed, moderately dark complexioned persons as well as in classically sunburn-prone light-haired, light-complexioned, blue-eyed ones, reports Dr. Alfred W. Kopf of New York Medical Center. It is the exception, rather than the rule, for skin cancer patients to have all the stereotype features, a study has demonstrated. Among 771 patients with skin cancer, only 28 met all the “standard” criteria. About one-third of the cancer group had brown eyes, 43% had moderately dark complexions, and 37% had moderate abilities to tan.—*Modern Med.*, Jan. 3, 1966, p. 32.

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Contact: Medical Director, Highland Hospital, Asheville, N.C. 28801



A non-profit, psychiatric institution, offering therapeutic milieu, group and individual psychotherapy, and standard somatic treatments. Limited day-patient and out-patient services. The hospital is located in a 75-acre park amid the scenic beauties of the Smoky Mountain Range of Western North Carolina, affording exceptional opportunity for physical and emotional rehabilitation.



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lower mg intake per day
600 mg versus 1,000 mg

in G.U. infections
broad-spectrum performance

DECLOMYCIN[®] DEMETHYLCHLORTETRACYCLINE

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

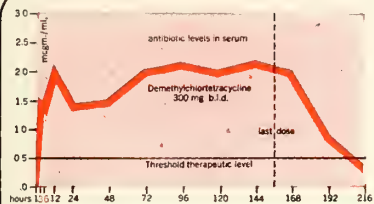
Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

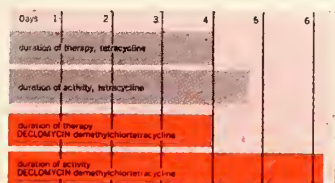
Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; **Tablets:** film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.



high activity

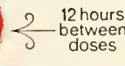
From Sweeney, W. M., Dornbush, A. C., and Hardy, S. M.,
Amer. J. Med. Sci. 243:296 (Mar) 1962



1-2 "extra" days' activity
after the last dose to protect against relapse



one 300 mg Tablet
mid-morning



one 300 mg Tablet
mid-evening

It's made for b.i.d.

RADIATION CONTROL BOARD ASSUMES DUTIES

When the 1963 Session of the State Legislature enacted the State Radiation Control Law, one of the provisions of the law provided that the Governor could enter into an agreement with the U. S. Atomic Energy Commission, whereby, the State of Alabama would assume regulatory responsibility for certain radioactive materials. One of the objectives of the State Health Department since this Act became law has been to develop an adequate radiological health program and staff to enable Alabama to enter into this agreement. The execution of this agreement on July 25 is an indication that the radiation control program in Alabama has matured and is now assuming its full responsibility for the control of radiation in the State.

It should be noted, that in addition to the control of radioactive materials previously licensed by the AEC the State also exercises control over radium, x-ray machines and other radioactive materials not regulated by the AEC. Also, a laboratory facility for determining the type and quantity of radioactivity in the environment is maintained. The real significance of the agreement is that Alabama now has a complete radiological health program administered by the State Health Department which is responsible for all phases of radiation control in the State.

Remarks By

Dr. Clifford K. Beck, Acting Director of Regulation On the Occasion of the Signing of the Regulatory Agreement with the State of Alabama

Montgomery, Alabama

July 25, 1966

It is both a privilege and a pleasure to be here in Alabama today, Governor Wallace, to participate with you in the signing of this

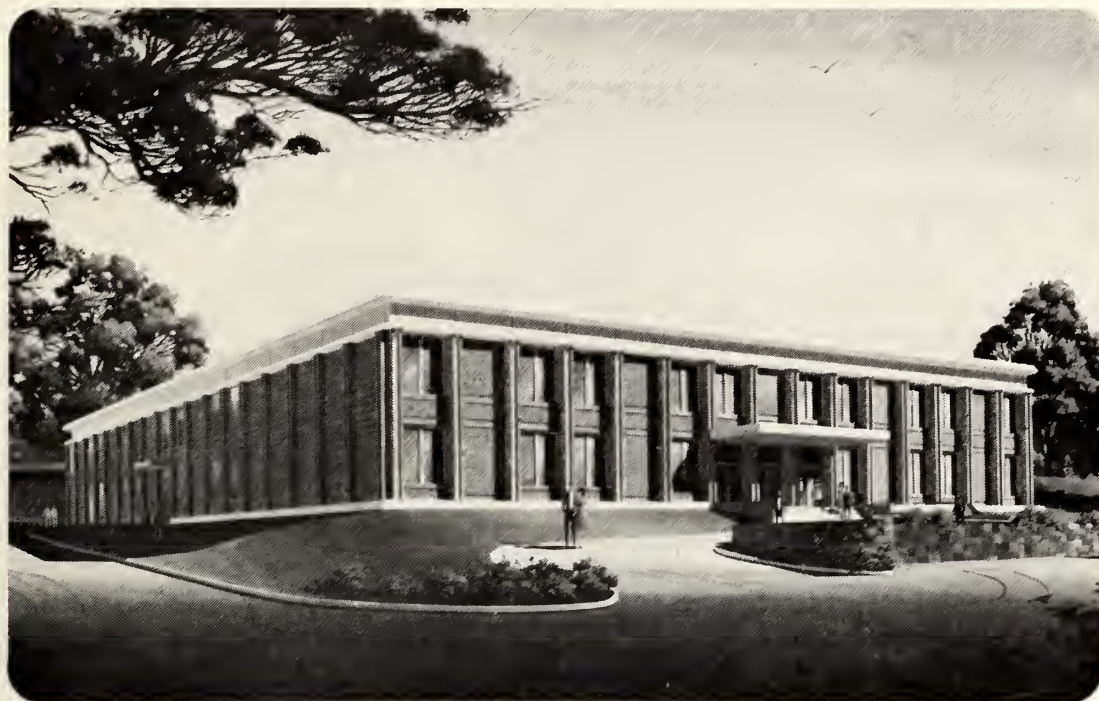


Shown above from left to right, Mr. Eber Price, U. S. Atomic Energy Commission; Dr. Clifford K. Beck; Governor George C. Wallace; Dr. Ira L. Myers, State Health Officer; Mr. William T. Willis, Director, State Division of Radiological Health; and Mr. Robert Griffith, Southern Interstate Nuclear Board.

agreement under which Alabama will assume certain regulatory authority and responsibility over the possession and use of atomic energy materials in this State.

Alabama is a leading industrial State of the South. Today Alabama is joining 12 other States in assuming an important role in another area—namely, the regulation of atomic materials for the protection of the health and safety of its citizens. Of these 12 States, over half are in the South: Arkansas, Florida, Kentucky, Mississippi, North Carolina, Tennessee and Texas. It is natural that the South should have a keen interest in the nuclear industry since here is where a large portion of our national atomic energy facilities is lo-

(Continued on Page 308)



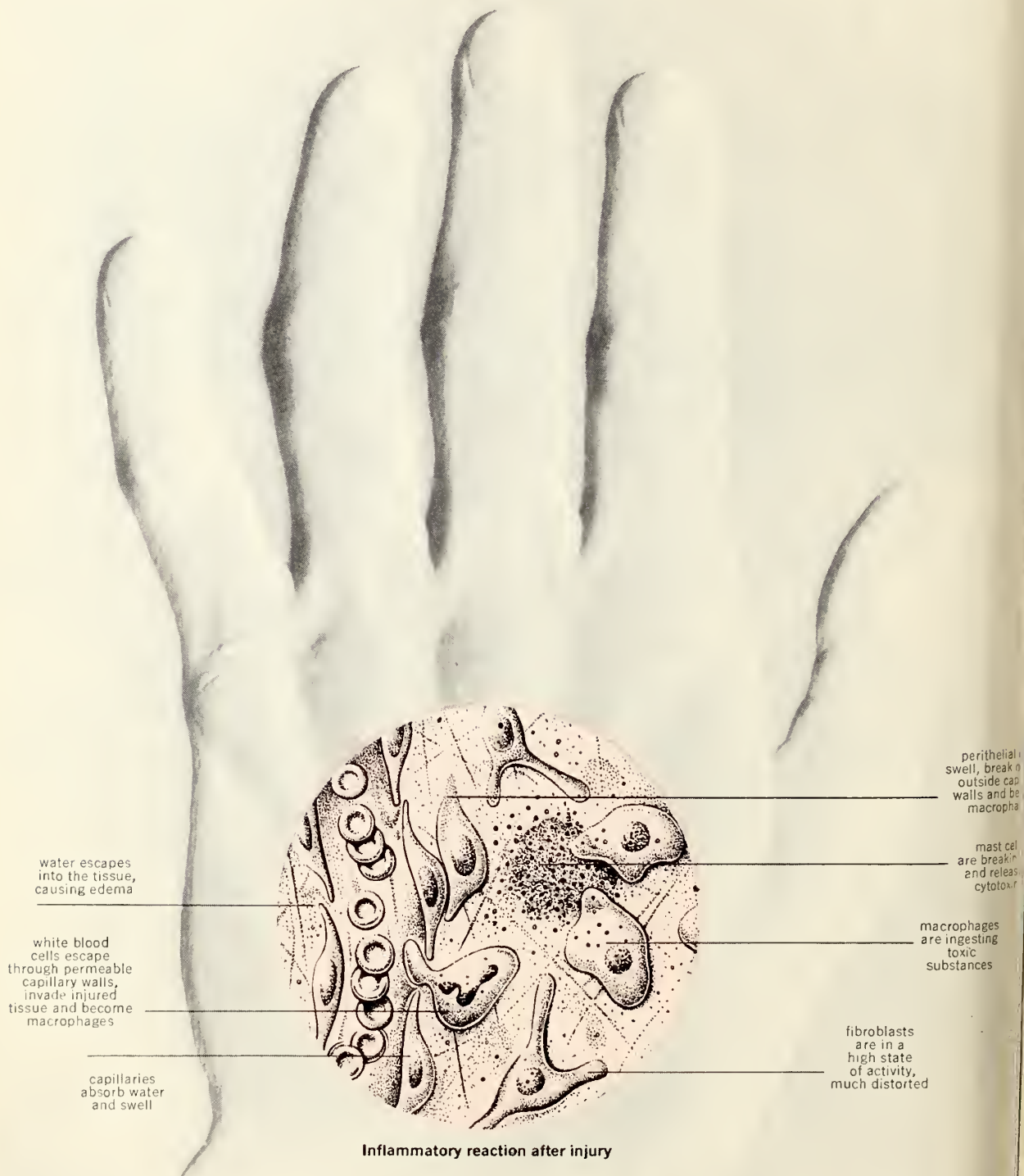
New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

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Cinemicrography* of living tissue shows
that Synalar works at the cellular level to stop
the inflammatory chain reaction



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A 16 mm. film utilizing time-phase cinemicrographic techniques. Available for showing on request to Syntex Laboratories.

In contact dermatitis

Synalar®

(fluocinolone acetonide)

stabilizes cell and capillary walls
protects against the chemical impact of cytotoxins
interrupts the chain reaction of destructive
changes at the cellular level
permits inactivation, absorption and transportation
of toxins away from the injured area by natural
processes... edema is absorbed and cells return
to normal size, shape, and activity

In inflammatory dermatoses choose a steroid synthesized specifically for topical use. Synalar (fluocinolone acetonide) provides therapeutic results often comparable to those of systemic and intralesional corticosteroids with fewer hazards.¹⁻³

when complicated by infection

neo-synalar®

(fluocinolone acetonide-neomycin sulfate cream)

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; **for emollient effect:** Ointment 0.025%, 15 Gm. tubes; **for maintenance therapy:** Cream 0.01%, 15 Gm. tubes, 45 Gm. tubes, 120 Gm. jars; **for intertriginous or hairy sites:** Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; **for infected inflammatory dermatoses:** Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

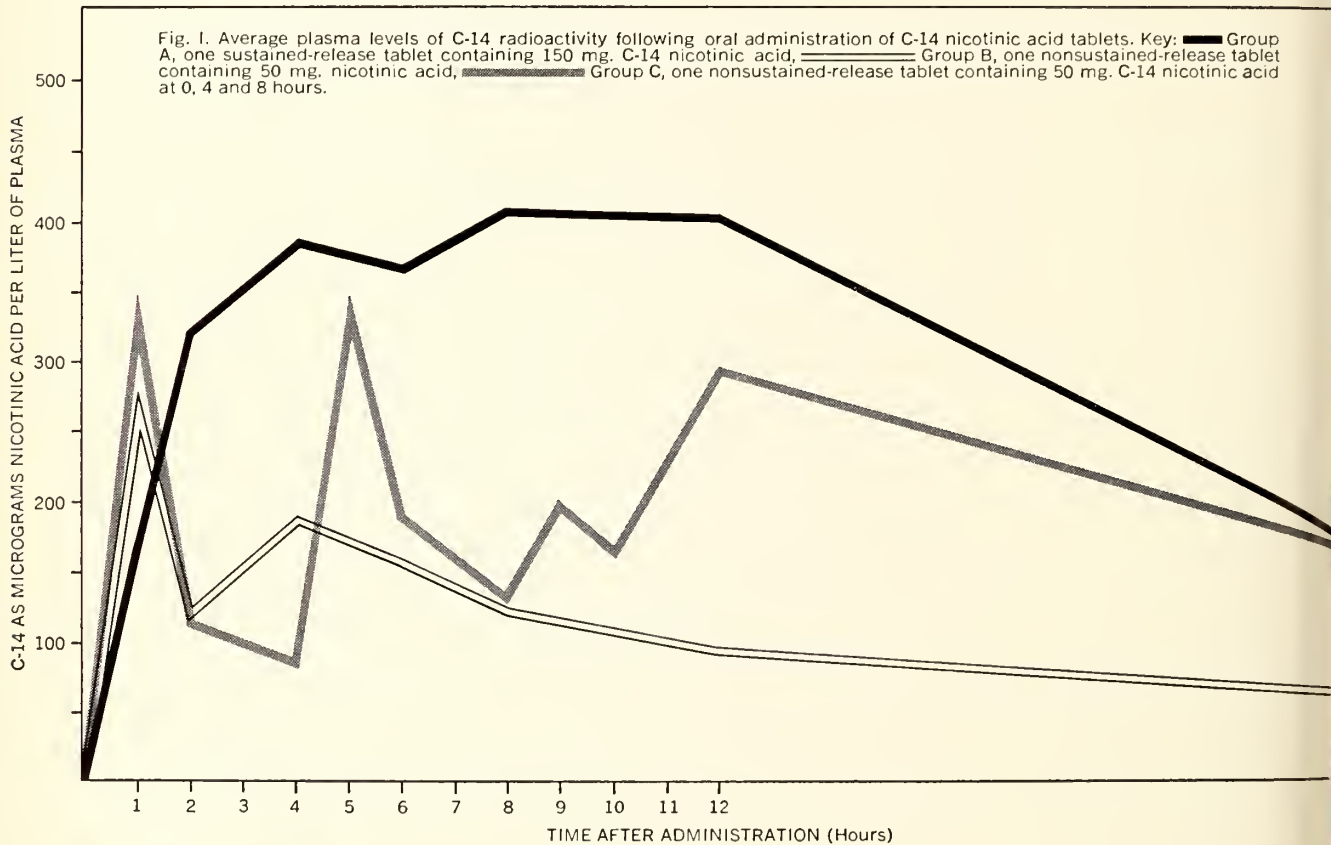
Contraindications: Tuberculous, fungal, and most viral

lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. The neomycin in Neo-Synalar Cream rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions.

References: 1. Kane, B. *Canad Med Ass* 188:999 (May 28) 1963. 2. Schollz, J. P. *Can Med* 95:224 (Oct) 1961. 3. Jansen, G. T., Dillars, C. J., and Honeycutt, W. M. *Arch Derm* 92:283 (Sept) 1965.

fluocinolone acetonide — an original steroid from
SYNTEX 
LABORATORIES INC., PALO ALTO, CALIF.

Sustained circulatory, respiratory and cerebral stimulation for the



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

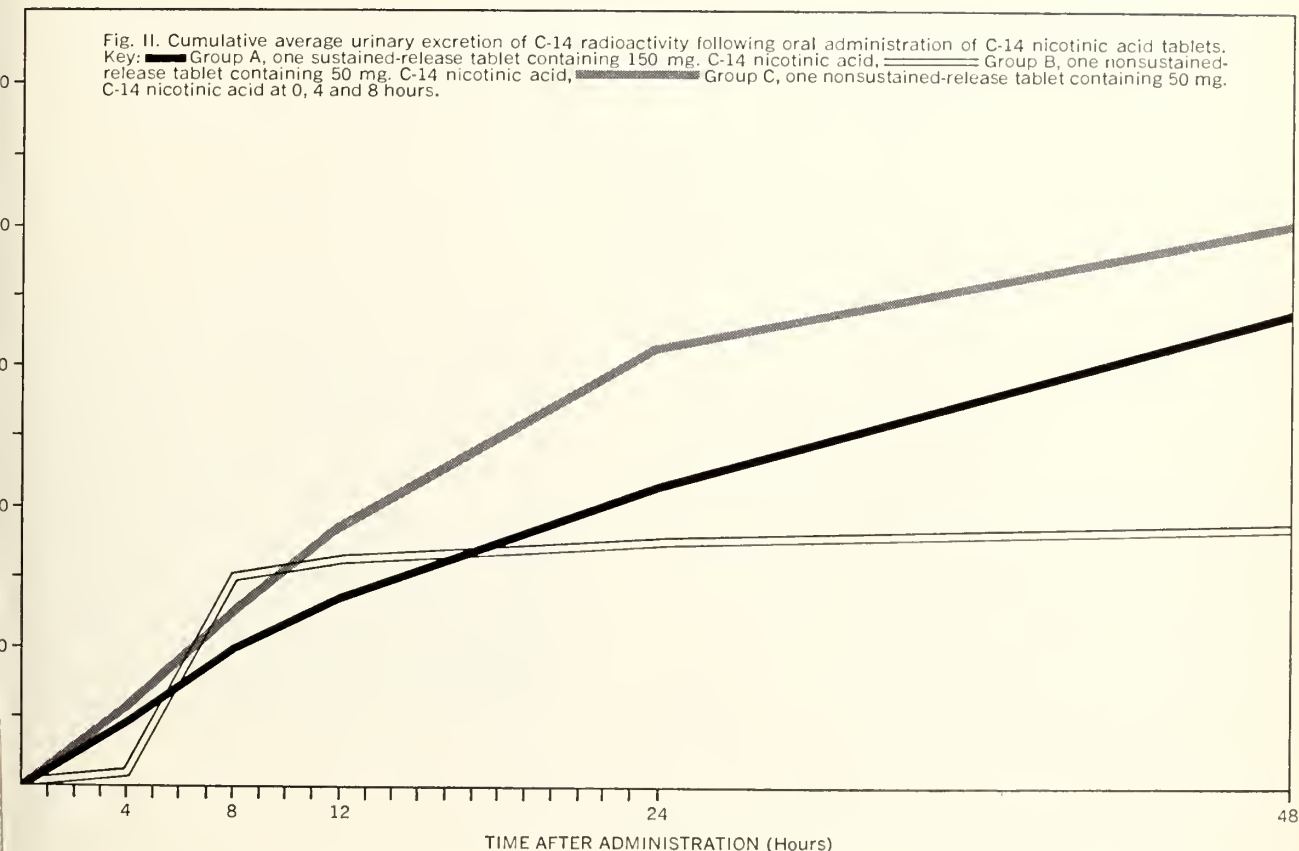
mindedness or senile confusion. Therapy can be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also cerebrovascular circulation is complemented by pentylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ed and debilitated

Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, anxiety and irritability are reduced. Prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-extended nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

"First with the Retro-Steroids"

PHILIPS ROXANE LABORATORIES

Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

RADIATION CONTROL

(Continued from Page 302)

cated, including the production and research facilities at Oak Ridge, the production facilities at Paducah, Kentucky, and the Savannah River plant at Aiken, South Carolina.

This step you are taking today follows hard on the heels of another giant stride in the forward progress of atomic energy utilization announced a few short weeks ago, which also, incidentally involved Alabama. I refer to the recent announcement by the Tennessee Valley Authority of plans for construction of a nuclear power generator station on Wheeler Reservoir near Decatur. The station is planned as a two-unit, 2,000,000 kilowatt plant, each unit having a gross electrical output of over a million kilowatts.

That Alabama has as well an important position in the national space program is apparent from nationwide recognition of the important work in progress at Huntsville.

I recall also that Alabama is the native State of many outstanding nuclear physicists and inventors, including among them Dr. Robert J. Van de Graaff who was born in Tuscaloosa. Dr. Van de Graaff invented the famous Van de Graaff accelerator—an electrostatic generator which has been for a long time and still continues to be one of the basic research tools in the field of atomic energy.

The agreement which we are signing today under which the State is assuming new authority and responsibility is simply another milestone in Alabama's progress in exercising its proper role in this new world of science and technology in which we live.

This agreement is made possible under a 1959 amendment to the Atomic Energy Act. Prior to 1959, the responsibility for the control of atomic energy materials rested solely with the U. S. Atomic Energy Commission. This fact evolved largely from the industry's having been developed in a wartime, national security setting. In those days, the Federal Government had the only access and nearly the only competence to assure safety in the uses of those materials. The Act was

The discomforts of
**DIARRHEA
MUCOUS COLITIS
DIVERTICULITIS
SPASTIC URETERITIS
BLADDER SPASM**

*are relieved by
direct musculotropic action
with.....*



Trocinat[®]

BRAND THIPHENAMIL HCl

Available in 100 milligram pink sugar-coated tablets.

The high therapeutic index permits dosage sufficient to relieve spasm promptly.

Administer 4 tablets every 4 hours until relief is constant, then adjust maintenance dosage.

Trocinat BRAND THIPHENAMIL HCl

*Directly relaxes smooth muscle spasm
Combats hypermotility
Non-mydriatic, may be used in glaucoma*

Sixteen years of clinical use, with absence of untoward effects, has established the safety and effectiveness of Trocinat.

Trocinat is metabolized in the body and completely eliminated, which is a safety factor. Dosage must be sufficient to maintain the therapeutic blood level.

DISPENSED IN BOTTLES OF
100, 250 AND 2000 TABLETS

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amended as a result of the growing interests of the States in assuming responsibility in this area. Traditionally, the States have exercised regulatory responsibility in the field of public health and safety in all other areas, and it is only natural that States should feel a concern in radiation safety as well. The amendment was intended to respond to this growing interest by opening a door to a State's role in this field and in defining the potential respective responsibilities of the Federal Government and of the States with respect to the regulation of by-product source, and special nuclear materials. The new legislation established a procedure by which the Atomic Energy Commission could enter into an agreement with the governor of a state providing for the transfer to the state of a significant portion of AEC's regulatory authority. This was the authority for the regulation, licensing, inspection and enforcement, in the interest of public health and safety, of byproduct materials, better known as radioisotopes; of source materials, which include the raw materials of nuclear energy, uranium and thorium; and of small quantities of fissionable materials.

Under the law, the AEC retains its regulatory authority and responsibility over, among other things, construction and operation of nuclear facilities such as reactors, the export and import of nuclear energy materials and the ocean disposal of nuclear wastes.

Upon enactment of the 1959 amendment enabling the transfer of regulatory authority to States, the Commission's program of cooperation with States expanded and a number of States began actively working toward the assumption of this responsibility; that is, adopting legislation which would enable state governors to enter into agreements with the AEC and developing programs for carrying out this responsibility.

The State of Alabama has been carrying out radiation control programs with respect to X-ray machines and radium, which the AEC does not regulate, since 1958, thereby demonstrating its determination to assure protection of the health and safety of its

citizens in this field. The State and its Health Department are to be commended for this early and progressive development of a program in the important field of radiation protection.

In 1963, the legislature of Alabama enacted a Radiation Control law authorizing the Governor to enter into an agreement with the U. S. Atomic Energy Commission under which Alabama would assume the prescribed portion of the AEC's regulatory authority. This is the agreement which we are signing today. It will become effective on next October 1st.

Under the agreement, Alabama will take over the regulation of some 200 persons and organizations in this State who now use radioactive materials under AEC licenses. These licensees include industrial firms, colleges and universities, medical institutions, physicians and others—an indication of the broad range of technologies in which radioactive isotopes can be effectively used.

I have merely pointed out that the Southern States have exhibited an active interest in the regulatory phases of atomic energy. They have been equally active in the developmental aspects through the organization known as the Southern Interstate Nuclear Board. The Board is a regional compact made up of 17 Southern States including Alabama. The board was conceived and organized to help foster the sound development of nuclear energy in the South in agriculture, industry, medicine and research. Among the functions of the SINB are: serving as a clearing house for information, sponsoring symposia and conferences, conducting studies, cooperating with private industry in compiling data and studying nuclear projects of potential interest to the area. The Board is not another level of government, but is a compact of the individual states, offering services to the 17 member states and also permitting joint interstate action in the field of atomic energy.

In conclusion let me say, Governor Wallace, that it is with a great deal of satisfac-

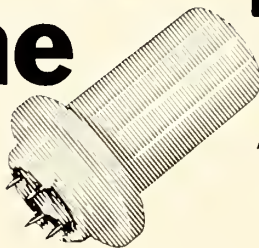
(Continued on Page 311)

what time is it?

For the past
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one new case
of active tuberculosis
reported for every
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RADIATION CONTROL

(Continued from Page 309)

tion that we in the Atomic Energy Commission enter into this agreement with Alabama. The responsibility which the State now assumes is a responsibility to continue the program initiated by the Atomic Energy Commission, to improve upon it, to keep abreast of developing technology, and to be ever ready to deal with new problems. It will be of the utmost importance that your regulatory program be continuously coordi-

nated with the programs of other states which enter into agreements with the Commission, and with the programs of Federal agencies having regulatory responsibility in the atomic energy fields so that a compatible system of regulation in this field may be maintained throughout the country.

To this end, we will do our utmost to cooperate with you and to assist you wherever possible in the days ahead. Our best wishes go with you in this new and important undertaking.

THE FEDERAL GOVERNMENT DECIDES . . .

As of today, the Federal government may designate the official name of a drug product, if it is not satisfied with the originator's suggestion. The Federal government maintains surveillance over clinical research on the project, and can halt or redirect it at any time. The Federal government decides whether the product can be placed on the market. The Federal government decides when to permit its sale. The Federal government decides its method of distribution. And finally, the Federal government decides what can be advertised about the product. It is still within the privacy of our industry to make two important decisions—whether to undertake laboratory research on a given project, and what to charge for a product.—C. Joseph Stetler to Northern California Pharmaceutical Association, January 29, 1966.

*When the problem
is only skin deep*

USE 'POLYSPORIN'[®] brand POLYMYXIN B-BACITRACIN OINTMENT

**for topical antibiotic therapy with minimum
risk of sensitization**

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in 1/2 oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.



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The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—The Public Health Service Advisory Committee on Immunization has concluded that routine typhoid fever vaccination is not needed any longer in the United States.

Surgeon General William H. Stewart accepted the findings of the committee and stated as PHS policy that immunization against the disease is not recommended on a routine basis.

The committee reported that the incidence of typhoid in this country had declined steadily for many years and now is less than 500 cases a year. A continuance of the downward trend was predicted.

"Cases are sporadic and are primarily related to contact with carriers rather than to common source exposure," the committee said. "Recognizing this epidemiologic pattern of typhoid fever, redefinition of the role and use of typhoid vaccine is indicated.

The committee further stated that, "although typhoid vaccine has been suggested for individuals attending summer camps and those in areas where flooding has occurred, there are no data to support the continuation of these practices."

However, select immunization was recommended in the following situations:

—Intimate exposure to a known typhoid carrier as would occur with continued household contact.

—Community or institutional outbreaks of typhoid fever.

—Foreign travel to areas where typhoid fever is endemic.

In a separate report, the advisory committee predicted relatively little influenza during the 1966-67 season, but recommended vaccination after Sept. 1 for certain high-risk groups—such as the chronically ill and older persons.

The committee pointed out, however, that it is reasonable to expect that limited outbreaks of Type A₂ influenza will occur in parts of the United States not experiencing Type A disease in 1964-65 or 1965-66. Similarly, the possibility of some Type B influenza is recognized particularly in the southwest.

"Vaccination when called for should begin as soon as practicable after September 1 and ideally should be completed by mid-December," the committee said. "It is important that immunization be carried out before influenza occurs in the immediate area since there is a two-week interval before development of antibodies."

Because variations in influenza viruses during the 1965-66 season were not of major significance, the composition of the 1966-67 vaccine is unchanged from that prepared for 1965-66.

* * *

A Senate Government Operations Subcommittee said that more information is needed in the field but that scientific data now available does not indicate human health hazards of sufficient significance to warrant drastic curbs on the use of pesticides.

However, the subcommittee reported that "the magnitude of the future risk is uncertain in many important areas."

"Knowledge regarding the risk of chemical pesticides . . . will have to be broadened and refined considerably in order to provide clear-cut answers to questions that will be

(Continued on Page 314)

Most of my patients with high blood pressure are as old as I am. A lot of them are living on pensions. They're grateful when I can keep prescription costs down.

Regroton®

Chlorthalidone 50 mg. reserpine 0.25 mg.

One tablet daily
brings pressure down

Advantage: Both components of Regroton are long-acting.

Usual dosage: One tablet daily with breakfast.

Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.

Warnings: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte balance and potassium depletion may occur; take particular care in patients with or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.

Side effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Other side effects include angina pectoris, anxiety, depression, drowsiness, hypotension, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness.

For full details, see the complete prescribing information.

Availability: Bottles of 100 and 1000 tablets.

Geigy



(Continued from Page 312)

forced by the increasing need for pest control in the future," said a subcommittee report based on a two-year study.

"While some of the more gloomy prophecies that had been raised could not be supported by hard scientific fact, it is also true that science could not and still cannot prove that some of these prophecies are untenable."

To combat the human health dangers, the report recommended that the Department of Health, Education and Welfare, accelerate an environmental health program; increased research in human pharmacology; development of safer chemical pesticides which are safer for human beings; greater emphasis on development of non-chemical pest-control methods; training of agricultural workers in good hygiene practices in using pesticides;

and general educational programs on health in the chemical age.

* * *

The Food and Nutrition Board of the National Academy of Sciences believes that it may be well for many Americans to moderately reduce the amount of fats they eat and substitute some polyunsaturated for saturated fats.

However, the board concluded in a lengthy report, "Dietary Fat and Human Health," that present evidence on the connection between dietary fat and cardiovascular diseases is insufficient to warrant recommendations for radical dietary changes.

The board's study was directed to the problem of how much and what kind of fat is compatible with human health. The report

(Continued on Page 316)

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**A patient centered
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Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



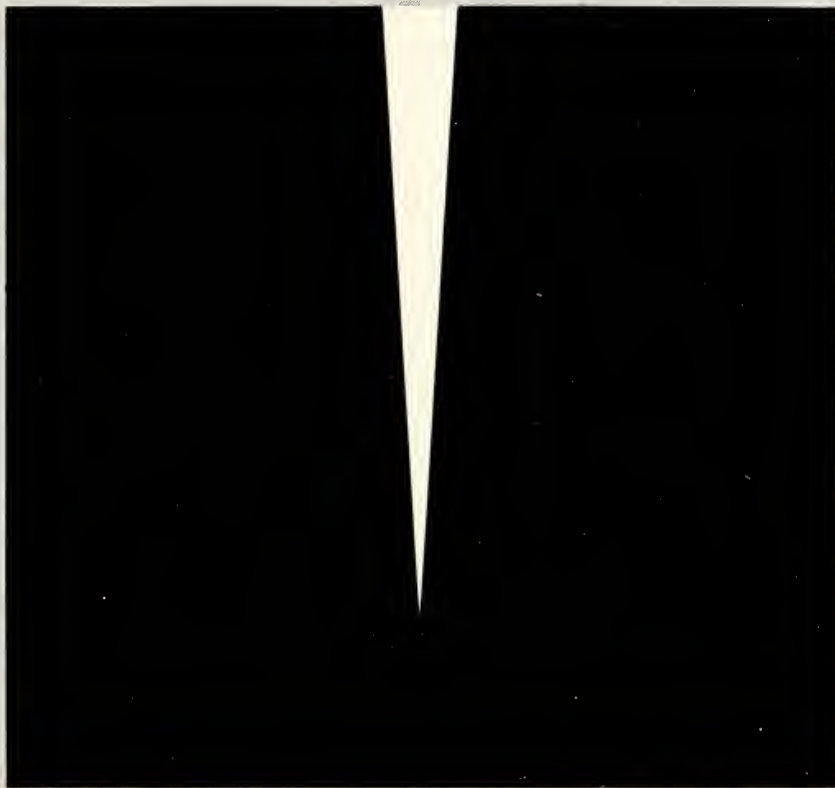
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HOSPITAL**
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A good way to describe 'Stelazine'. It's different from the tranquilizers that sedate and dull your anxious patients. Its antianxiety effect is direct. On 'Stelazine', your patients can be calmed yet remain alert.

And 'Stelazine' offers additional benefits. Dependence has not been reported. At low doses, side effects are minimal. Its b.i.d. dosage is convenient and economical.

Stelazine[®]

brand of trifluoperazine

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. **Contraindications:** Comatose or greatly depressed states due to C.N.S. depressants and in cases of existing blood dyscrasias, bone marrow depression and liver damage. **Precautions:** Use with caution in angina patients and in patients with impaired cardiovascular systems. Antiemetic effect may mask symptoms of other disorders. An additive depressant effect is possible when used with other C.N.S. depressants. Prolonged administration of high doses may result in accumulative effects with severe C.N.S. or vasomotor symptoms. Use in pregnant patients only when necessary for the patient's welfare. **Side Effects:** Occasional cases of mild drowsiness, dizziness, mild skin reactions, dry mouth, insomnia and amenorrhea. Neuromuscular (extrapyramidal) reactions (motor restlessness, dystonias, pseudo-parkinsonism) may occur and, in rare instances, may persist. In addition, muscular weakness, anorexia, rash, lactation, hypotension, and blurred vision have been observed. Blood dyscrasias and cholestatic jaundice have been extremely rare.

For a comprehensive presentation of 'Stelazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories, Philadelphia



(Continued from Page 314)

emphasized than any changes in consumption of fat should be made on an individual basis with consideration given the consequent changes in caloric and nutrient intake.

"Until we learn more about which fats are desirable nutritionally, the Board recommends that the American consumer should partake of the foods that make up a varied, adequate, and not overly rich diet and maintain a normal body weight by judicious control of caloric intake and by daily exercise," the report said.

"A large amount of information has accumulated relating dietary fats to the etiology of human atherosclerosis and its complications, particularly coronary artery disease. As yet, the causes and course of development of atheroma and its relation to coronary heart disease in man are imperfectly known. Disorders of fat transport or meta-

bolism or both certainly participate, but are not the only factors. Heredity is involved in individual susceptibility. Disorders of blood flow and blood clotting are implicated in atheroma formation in addition to contributing to the fatal complications of the disease.

"Evidence to support the concept that increased plasma concentrations of cholesterol are atherogenic is considerable but not conclusive . . . Many, but not all, population studies indicate that diets high in fat, among other nutrients, are correlated with higher concentrations of plasma cholesterol and with increased prevalence of cardiovascular disease. However, proof of a causal relationship is lacking. In the majority of the adult population the concentration of plasma cholesterol can usually be reduced by increase in the quantity of polyunsaturated fat in the diet at the expense of saturated fat. That this de-

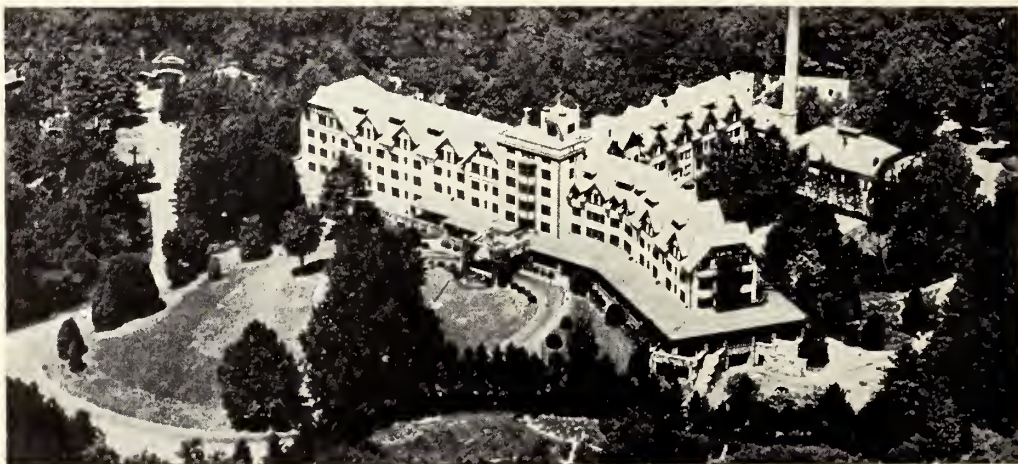
(Continued on Page 318)

APPALACHIAN HALL

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An institution for the diagnosis and treatment of psychiatric and neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin coma, electroshock and psychotherapy are employed. The institution is equipped with complete laboratory facilities, including electroencephalography and x-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

MOLECULAR REMODELING—

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.¹ Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,² the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.³

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.⁴ However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic activity made it impractical for clinical use as a diuretic.⁵

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors—in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.⁶ The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.⁷ And, like its predecessor, acetazolamide precipitated metabolic acidosis. Its prolonged use could result in hypokalemic acidosis.⁷

'Thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide

group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.⁸ Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.^{9,10}

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.¹¹ It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.¹¹ The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.¹¹ Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.⁷

Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.¹²

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with

doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."¹³

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

Contraindications: Severe renal impairment; previous hypersensitivity.

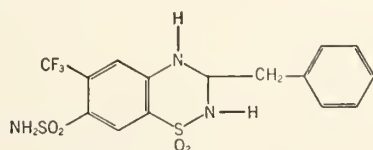
Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin \bar{K} [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

References: 1. Southworth, H.: *Proc. Soc. Exper. Biol. & Med.* 36:58, 1937. 2. Mann, T. and Keilin, D.: *Nature* 146:164, 1940. 3. Pitts, R. F., and Alexander, R. S.: *Am. J. Physiol.* 144:239, 1945. 4. Schwartz, W. B.: *New England J. Med.* 240:173, 1949. 5. Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: *Edema Mechanisms and Management*, Philadelphia, W. B. Saunders Co., 1960, p. 259. 6. Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 254. 7. Werko, L., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 188. 8. Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 274. 9. Maren, T. H., and Wiley, C. E.: *J. Pharmacol. & Exper. Therap.* 143:230, 1964. 10. Earley, L. E., and Orloff, J.: *Ann. Rev. Med.* 15:149, 1964. 11. Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 276. 12. Ford, R. V., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 290. 13. cited in Fuchs, M., and Mallin, S. R. (ref. 11): *op. cit.*, p. 283.



Naturetin®

SQUIBB BENDROFLUMETHIAZIDE
to reduce excess fluid
or high blood pressure

SQUIBB



'The Priceless Ingredient' of every product
is the honor and integrity of its maker.

(Continued from Page 316)

gree of reduction in plasma cholesterol is beneficial is still uncertain . . .

" . . . in spite of the large amount of information accumulated in recent years about atherosclerosis and its pathogenesis, many gaps in knowledge remain. Results of recent studies, while valuable and thought provoking, do not provide sufficient data for firm recommendations for radical dietary changes."

* * *

The Social Security Administration said that the 460,000 medicare patients in hospitals during the first month of the program's operation did not result in any overcrowding.

There were a few isolated instances of overcrowding, mostly in rural areas, but they already existed before medicare started July 1, the SSA said.

The elderly patients occupied from 30 to

35 per cent of the beds in general hospitals, in comparison to about 25 per cent before medicare. Federal officials had estimated a 5 per cent increase.

Inquiries from intermediaries to SSA headquarters as to eligibility for Plan B medical benefits totalled 8700 through July 22. A few spot checks showed assignments leading over direct billings by a small margin. But assignments normally would be filed sooner than direct billings.

There still were about 200 hospitals in the south that had not been qualified as to civil rights requirements on racial integration. This situation left 132 counties that have hospitals with none qualified at the end of the month. By states, the counties were: Mississippi 31, Georgia 23, Louisiana (parishes) 19, Texas 12, Virginia 11, South Carolina 9, Alabama 8, Arkansas 6, Kentucky 6, North Carolina 3, Tennessee 2, Florida 2, and West Virginia 1.



for psychiatric treatment

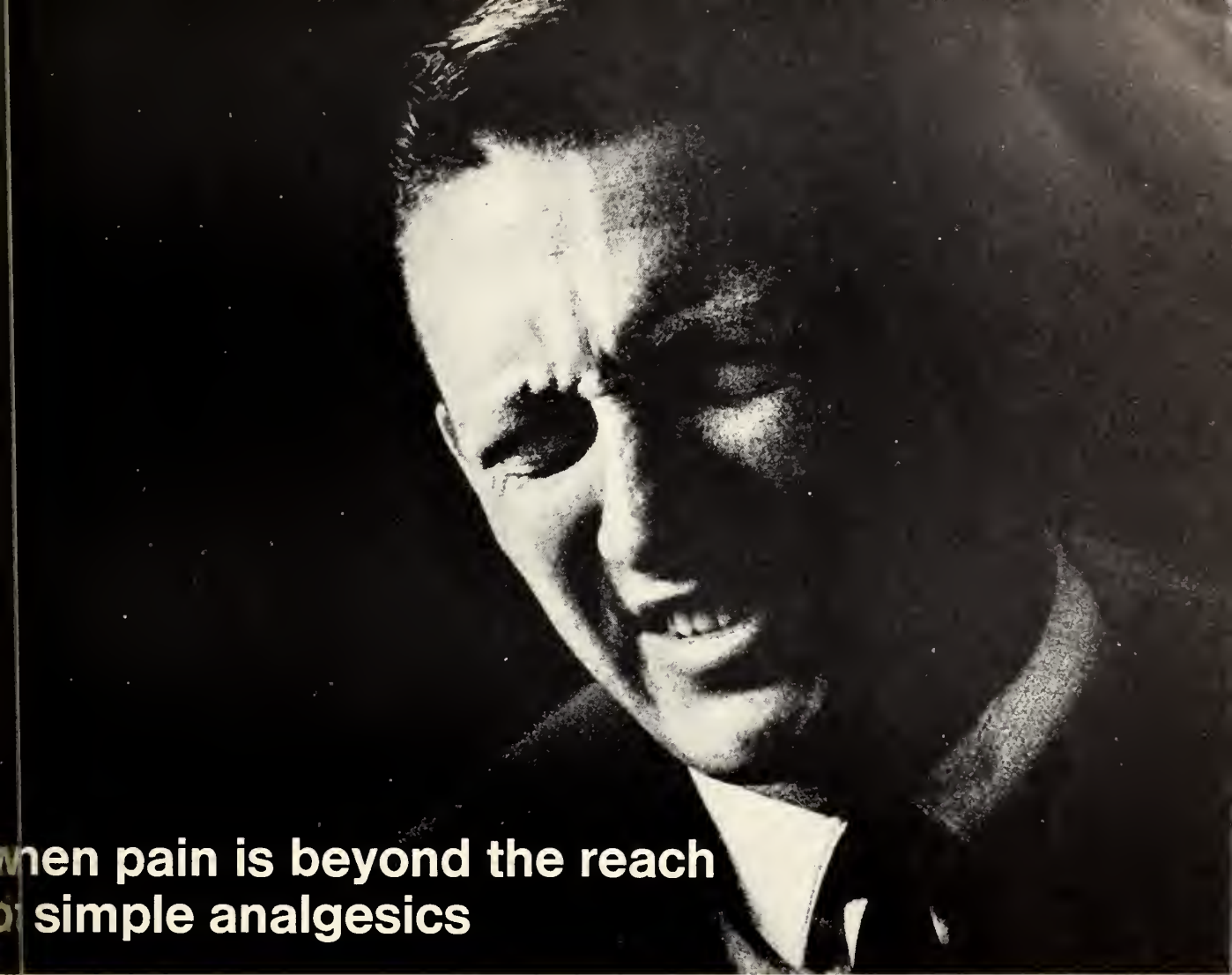
Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals □ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients

and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction □ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy □ *We will be pleased to provide further information upon request.*

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peachtree hospital

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Side effects have been minor. Occasionally gastric distress, weakness, sedation or dizziness occur. Reversible cholestatic jaundice has been reported on rare occasions. However, in 4,653 patients treated with chlormezanone, 97.7% had *no* side effects.¹ *Contraindication:* just one: sensitivity to aspirin. *Dosage:* Adults, usually 2 tablets three or four times daily. Children (from 5 to 12 years), 1 tablet three or four times daily.

1. Collective studies, Department of Medical Research, Winthrop Laboratories.

Winthrop

WINTHROP LABORATORIES, NEW YORK, N. Y. 10016

THIRD QUACKERY CONGRESS SLATED OCT. 7-8

The Third National Congress on Medical Quackery will be held October 7-8 at the Pick-Congress Hotel in Chicago.

Joint announcement of the Congress was made by F. J. L. Blasingame, M. D., executive vice-president of the American Medical Association, and Peter G. Meek, executive director of The National Health Council.

The AMA and The National Health Council, the nation's largest organization of professional governmental and voluntary agencies in the health field, will serve as co-sponsors of the October Congress.

The two previous National Congresses on Medical Quackery, in 1961 and 1963, were held in Washington, D. C.

The October Congress will be based on the theme of "Quackery: 1966" and will be aimed

at calling to the attention of the nation the perils posed by present-day fads and fallacies in the health field.

Each of the two earlier Congresses, which received wide public and professional acclaim, were attended by more than 600 persons interested in medical quackery, representing the fields of education, government, and professional and voluntary organizations. Plans are being made for an attendance—by invitation—of 750 to 1,000 persons at the Chicago Congress.

Details of the Congress, including the program of nationally-recognized speakers, will be announced in the near future. Inquiries should be addressed to John G. Thomsen, M. D., Chairman, American Medical Association, Committee on Quackery, 535 N. Dearborn St., Chicago, Illinois 60610.

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Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Warn against hazardous occupations requiring complete mental alertness. Use caution in administering to addiction-prone patients or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of child-bearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In elderly and debilitated and in children over five, limit dosage to smallest effective amount, increasing gradually as needed and tolerated. In general, concomitant use with other psychotropics is not recommended. Paradoxical reactions have been reported in psychiatric patients and hyperactive aggressive children. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Observe usual precautions in presence of impaired renal or hepatic function, impending depression and suicidal tendencies.

Adverse reactions: Drowsiness, ataxia and confusion may occur, especially in elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. Syncope occurs rarely. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis, jaundice and hepatic dysfunction) may develop occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy. Individual maintenance dosages should be determined.

Dosage: *Oral*—Adults: Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d.

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IN THIS ISSUE

Neonatal Mortality 377

Ophthalmological Services in a
Changing World 382

MASA Records Another Successful
Legislative Year 434

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OCTOBER 1966

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because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENADRYL. **SIDE EFFECTS:** Side reactions, commonly associated with antihistaminic therapy and generally mild, may affect the nervous, gastrointestinal, and cardiovascular systems. Most frequent reactions are drowsiness, dizziness, dryness of the mouth, nausea, and nervousness. BENADRYL is available in Kapseals® of 50 mg. and Capsules of 25 mg. 00666

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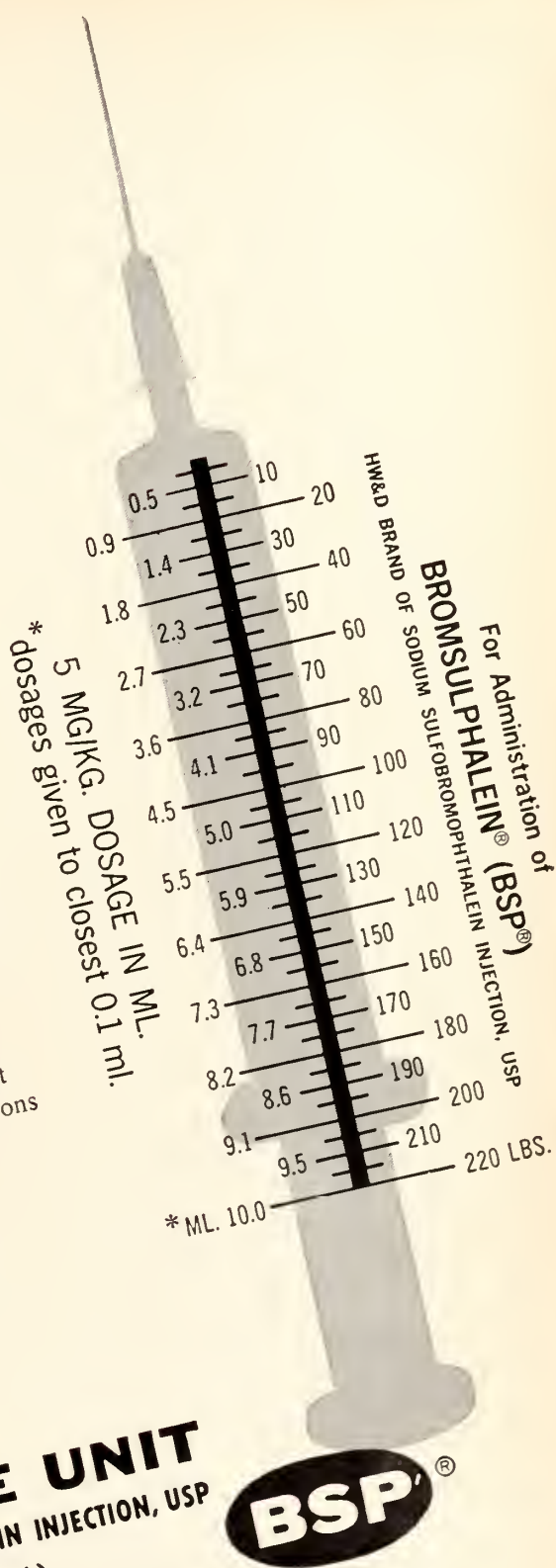
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Subscription Price \$5.00 Per Year
..... \$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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President's Page	325
Woman's Auxiliary	334
Editorial Comment	338
Give-Away Government On The Go-Go?	338
Association Loses A Capable Executive	338
Future Legislature Deserves Immediate Attention	339
Letter to the Editor	341
Twenty Years of Hill-Burton—A Tribute to the Honorable Lister Hill	343
Guest Editorial—Management of Time Is Acute Problem, Charles L. Hudson, M. D.	350
Association Forum	351
Dr. Paul Mertins Named to Board of Trustees	351
Patterson New Director; Ingram Joins Staff	352
Annual Report on Medical Licensure	356
Public Relations and the Medical Society—John M. Chenault, M. D., Decatur, Alabama	357
Medic Alert Saves Lives	368
Clinical Lectures to be Held at Colleges and Universities	370
Postgraduate Courses Feature of AMA Clinical Convention	372
Surgical Team Saves Cleft-Palate Pups	375
Scientific Section	377
Neonatal Mortality, Herschel P. Bentley, Jr., Birmingham, Alabama	377
Ophthalmological Services In A Changing World, Charles E. Jaeckle, M. D., Defiance, Ohio	382
Around the State	396
Muscle Shoals Medical Assembly	396
Alabama Rural Health Conference	398
Medical Progress Assembly	399
Vital Statistics	401
County Societies Meet	407
Laetrile Worthless in Treatment of Cancer	412
The Physician As A Resource in Mental Health Planning in Alabama	416
The Month In Washington	429
MASA Records Another Successful Legislative Year	434
National Survey Shows Patterns in Use of Health Services	439
Alabama Department of Public Health	454
More Physician Direction Achieved	454

When the stagnant sinus must be drained...



Transillumination of the sinuses—diffuse shadow on right side of face indicates unilateral maxillary sinusitis.

In the common cold, Neo-Synephrine is unsurpassed for reducing nasal turgescence. It stops the stuffy feeling at once. It opens sinus ostia to re-establish drainage and lessen the chance of sinusitis. With Neo-Synephrine, in the concentrations most commonly used, decongestion lasts long enough for extended breathing comfort, without endangering delicate respiratory tissue. Systemic side effects are virtually unknown. There is little rebound tendency.

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Porsche 911 6 cylinder engine, 148 horsepower, 5-speed synchromesh, (5-speed optional), top speed 130 mph
Porsche 912 4 cylinder engine, 102 horsepower, 4-speed synchromesh, (5-speed optional), top speed 115 mph

President's Page

On Changes in the Central Office

By the time this article appears in the *Journal* many changes in the central office of our Association will have occurred.

Mr. W. V. Wallace resigned 1 September 1966 to join the executive staff of the Medical Association of Georgia as a liaison officer to co-ordinate state programs and county society activities. "Dub" served our Association faithfully and well for a period of nine years. He assumed the position of Executive Secretary on the resignation of Mr. William A. Dozier, Jr., and acquitted himself with distinction until he decided that fields more lush and green existed east of our border. In addition to the execution of administrative duties of our Association, he was active in the Medical Society Executives Association and had participated in their annual program on several occasions.

On behalf of the Association, it is my privilege to thank "Dub" Wallace for his leadership through trying times and to wish for him and his family every success and happiness in their new venture.

Whether by a decree of fate, or by the cast of a benevolent eye by Hippocrates, we were prepared for this rather sudden resignation of the head of our Central Office force. On October 1, 1964 Mr. L. P. Patterson came with us after long service as the Managing Editor of the *Montgomery Advertiser*. His initial title was that of Assistant Executive Secretary, later changed to Director of Legislative Affairs and Publications. His knowledge of legislative maneuvers and manipulations, and his experience in the field of publications revealed a professional of high order.

Mr. Patterson's dedication is best exemplified by calling to mind the manner in which he continued to advise and direct us in legislative matters during the 1965 regular session



Dr. J. O. Finney

of the Legislature while he lay abed convalescing from myocardial infarction. In a remarkably short time he assumed his full responsibilities.

The burden of advising the proper courses to attain our goals in the recent special session of the Legislature was his, and the record of our successes must be attributed in a large measure to his efforts. The improvement in our *Journal* and the weekly *Alabama M. D.* is ample demonstration of his editorial competence. His ability in the area of organization and administration is readily apparent when one views the enormous strides forward in the development of ALAPAC since he became its Executive Director.

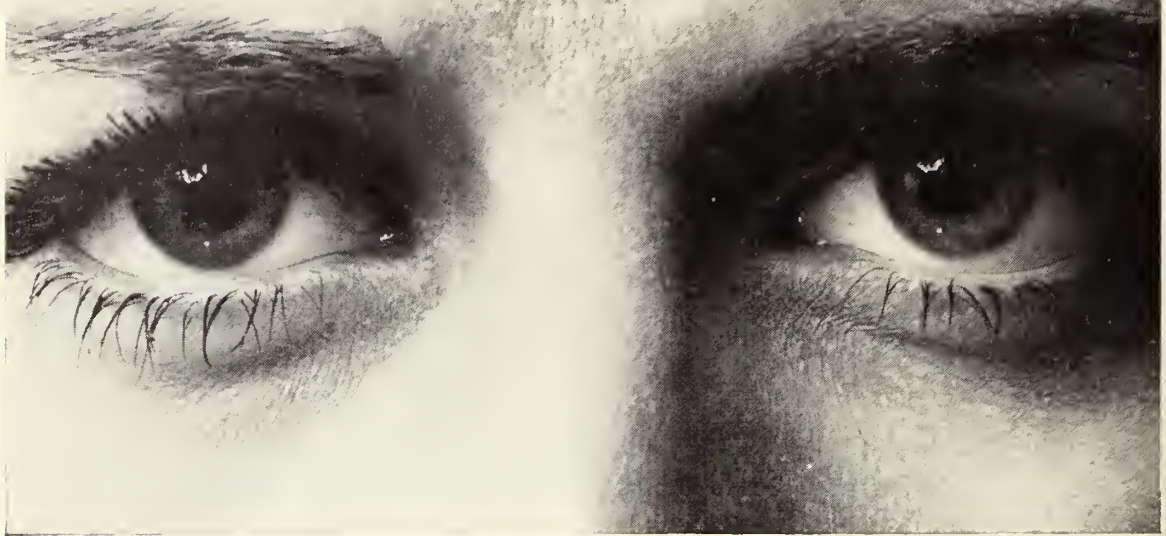
Truly, we were blessed by the falling of a seed, blown by the winds from that plain tree on the Greek isle of Kos. Not only are we fortunate in the leadership of Mr. Patterson, but also by having the loyal and efficient staff who works with him in our interest.

"Pat" Patterson, now our Executive Director, has already demonstrated astute capability in the area of recruitment by encouraging one of Montgomery's most outstanding young men to join us. He is Mr. Robert B. (Bob) Ingram, veteran reporter of the State Capitol in politics for the *Montgomery Advertiser*.

Mr. Ingram is a native of Centre, Alabama,

(Continued on Page 327)

WHEN
THE BACTERIAL U.R.I.
SETTLES
IN HER SINUSES



ACHROCIDIN®

Tetracycline HCl-Antihistamine-Analgesic Compound

Each tablet contains:

ACHROMYCIN® Tetracycline HCl 125 mg
Phenacetin 120 mg

Caffeine 30 mg
Salicylamide 150 mg
Chlorothen Citrate 25 mg

The patient can feel better while getting better. ACHROCIDIN brings the treatment together in a single prescription—prompt symptomatic relief together with early, potent control of the tetracycline-sensitive organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

Effective in controlling complicating tetracycline-sensitive bacterial infection and providing symptomatic relief in allergic diseases of the upper respiratory tract.

Contraindication—History of hypersensitivity to tetracycline.

Warning—If renal impairment exists, even usual doses may lead to liver toxicity. Under such conditions, lower than usual doses are indicated and if therapy is prolonged, tetracycline serum level determination may be advisable. Hypersensitive individuals may develop a photodynamic reaction to natural or artificial sunlight during use. Individuals with a history of photosensitivity reactions should avoid direct exposure while under treatment and treatment should be discontinued at first evidence of skin discomfort.

Precautions—Some individuals may experience drowsiness, ano-

rexia, and slight gastric distress. If excessive drowsiness occurs, it may be necessary to increase the interval between doses. Persons on full dosage should not operate any vehicle. Use may result in overgrowth of nonsusceptible organisms. If infections appear during therapy, appropriate measures should be taken. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Infections caused by beta-hemolytic streptococci should be treated for at least 10 full days to help prevent rheumatic fever or acute glomerulonephritis. Use of tetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect has been observed in usual short treatment courses.

Average adult dosage: 2 tablets four times daily, given at least one hour before, or two hours after meals.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

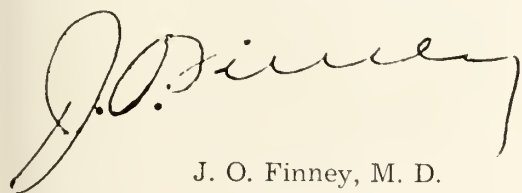
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veteran of the Marine Corps, with three years service in the South Pacific theatre, and is a graduate of Auburn University. An indication of the high esteem in which he is held by officials of the state government can be gleaned from a resolution unanimously adopted by the Senate and House which says in part:

"Bob's alert, reliable observance of and insight into situations, events, and personalities on the Alabama political scene, his straightforward recounting of his observations, and his lucid writing style have made his column and comments favorite reading material for thousands of Alabamians. His devotion to duty and his faithful adherence to the principles of good journalism have been a reflection of his fine personal traits of integrity, intelligence, and good humor, and are a credit to the journalistic profession . . ."

The wind of change came and was not ill. The wind is steady and strong, calling for us to break out the canvas and sail our ship toward the shores of excellence demanded of us in the exercise of the responsibilities of our Association, which is at the same time the State Board of Health of Alabama.



J. O. Finney, M. D.
President

Annual Temperature and Breast Cancer

The death rate from breast cancer in women increases with the mean annual temperature, being highest in the temperate zone, according to an analysis of vital statistics of Norway, Sweden, Scotland, England and Wales. Probability of the association being due to chance is less than 1 in 1,000, reports Dr. A. J. Lea of London. The nature of the factors concerned is unknown. Racial differences cannot explain the findings. The cancer specialist is extending his study world-wide. — *British Med. Jour.*, Feb. 20, pp. 488-490.

Sparkling Soft Drinks . . .

pleasure for patients who need liquids



Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

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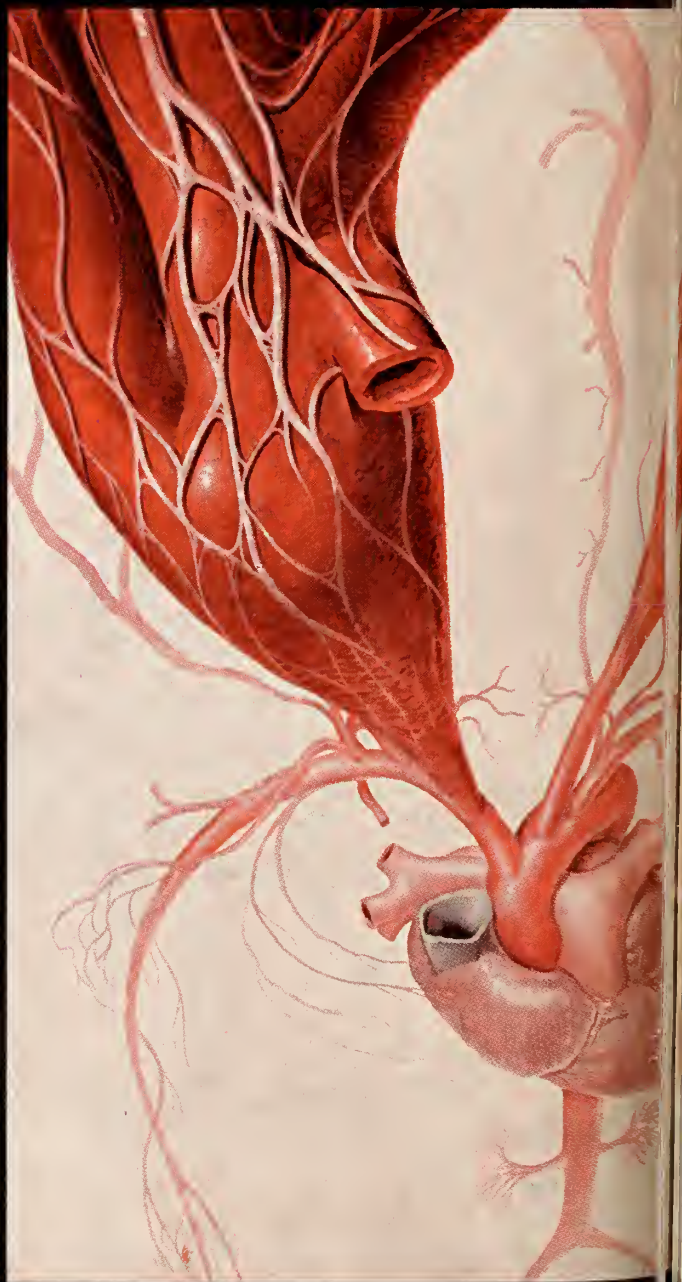
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*A Key Site of Action of the
Protoveratrine A in Salutensin*

"The main function of the
carotid sinus is regulation of
the blood pressure...."¹

The veratrum component of
Salutensin acts here (and in the
myocardium), initiating
"...a reflex fall in blood pressure
through a generalized vaso-
dilation and fall in heart rate."²



This is a logical Blood Pressure Regulator

**BECAUSE
IT ENHANCES
THE BODY'S OWN
MECHANISMS
FOR REDUCING
BLOOD PRESSURE**

In mild to moderate hypertension:

Salutensin enhances the body's own mechanisms for lowering blood pressure. The veratrum component of Salutensin acts on the carotid sinus and myocardial receptors, initiating "...a reflex fall in blood pressure through a generalized vasodilation and fall in heart rate."² To achieve this reflex modification of hypertension, Salutensin utilizes protoveratrine A.

In addition, to facilitate and maintain blood pressure reduction, Salutensin incorporates reserpine and a highly effective thiazide. In general, side effects have been

reported infrequently but may include those listed in the therapeutic summary.

Simple dosage—low-cost therapy: Many patients on Salutensin respond to 1 tablet *b.i.d.* Long-term economy is assured, since dosage can frequently be lowered after initial control is established.

Available: Prescription-size bottles of 60 tablets.

References: 1. Editorial: JAMA 191:592 (Feb. 15) 1965. 2. Meilman, E., in Moyer, J.H.: Hypertension, Philadelphia, W.B. Saunders Company, 1959, p. 395.

BRISTOL THERAPEUTIC SUMMARY
For complete information consult Official Package Circular.

Indications: Essential hypertension.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs.

Contraindications: Salutensin is contraindicated in severe depression.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss, which may cause digitalis intoxication, responds to potassium-rich foods, potassium chloride or, if necessary, stopping therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy two weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution with patients with peptic ulcers or renal insufficiency (if severe, Salutensin is contraindicated).

Side Effects: *Hydroflumethiazide:* Purpura plus or minus thrombocytopenia, hyperuricemia, leukopenia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet *b.i.d.*

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Division of Bristol-Myers Co.
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Salutensin[®]

Each tablet contains:
protoveratrine A, 0.2 mg.;
hydroflumethiazide, 50 mg.;
reserpine, 0.125 mg.

**How long will
it take her
to recover from
her hip fracture
if she just
doesn't care?**



Does she really care?
Is she alert, encouraged,
positive and optimistic
without getting completely
tired all soon?

Or has she given in to
the demoralizing impact
of confinement, disability
and dependency?

When functional fatigue
complicates convalescence,
Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that can often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic[®]

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

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now...introducing a new high-strength dosage

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A 'MAXIMUM SECURITY' ANTIBIOTIC*

- * **THE BROAD RANGE DEPENDABILITY OF TETRACYCLINE**
long established as the broad-spectrum agent of first choice in a wide variety of infections
- * **WITH THE ADDED SECURITY OF MEDIUM-SPECTRUM REINFORCEMENT**
triacytyloandomycin is highly active against the common 'coccal' pathogens, including certain strains of staphylococci resistant to penicillin and tetracycline
- * **ESPECIALLY VALUABLE IN U.R.I.**
provides decisive therapy in acute respiratory infections and other conditions in which staphylococci, streptococci or mixed flora are frequently encountered
- * **NOW AVAILABLE IN NEW STRENGTH FOR NEW CONVENIENCE AND ECONOMY**
Signemycin 375—high-potency capsules for simpler administration, greater patient economy

YCIN[®] 375

(tetracycline 250 mg.
triacytyleandomycin 125 mg.)

Indications: Indicated in the therapy of acute severe infections caused by susceptible organisms and primarily by bacteria more sensitive to the combination than to either component alone. In any infection in which the patient can be expected to respond to a single antibiotic, the combination is not recommended. Signemycin should not be used where a bacteriologically more effective or less toxic agent is available. *Triacytyleandomycin*, a constituent of Signemycin, has been associated with deleterious changes in liver function. See precautions and adverse reactions.

Contraindications: Contraindicated in individuals who have known hypersensitivity to any of its components. Not recommended for prophylaxis or in the management of infectious diseases which may require more than 10 days of continuous therapy. If clinical judgement dictates therapy for longer periods, serial monitoring of liver function is recommended. Not recommended for subjects who have shown abnormal liver function tests, or hepatotoxic reactions to triacytyleandomycin.

Precautions and Adverse Reactions: *Triacytyleandomycin*, administered to adults in daily oral doses of 1.0 gm. for 10 to 14 days, may produce hepatic dysfunction and jaundice. Adults requiring 3 gm. of Signemycin initially should have liver function followed carefully and the dosage should be reduced as promptly as possible to the usual recommended range of 1.0 to 2.0 gm. per day. Present clinical experience indicates that the observed changes in liver

function are reversible after discontinuation of the drug.

Use with caution in lower than usual doses in cases with renal impairment to avoid accumulation of tetracycline and possible liver toxicity. If therapy is prolonged under such circumstances, tetracycline serum levels may be advisable. In long term therapy or with intensive treatment or in known or suspected renal dysfunction, periodic laboratory evaluation of the hematopoietic, renal and hepatic systems should be done. Formation of an apparently harmless calcium complex with tetracycline in any bone forming tissue may occur. Use of tetracycline during tooth development (3rd trimester of pregnancy, infancy and early childhood) may cause discoloration of the teeth. Reversible increased intracranial pressure due to an unknown mechanism has been observed occasionally in infants receiving tetracycline. Glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and definite allergic reactions occur rarely. Severe anaphylactoid reactions have been reported as due to triacytyleandomycin. Photosensitivity and photoallergic reactions (due to the tetracycline) occur rarely. Medication should be discontinued when evidence of significant adverse side effects or reaction is present. Patients should be carefully observed for evidence of overgrowth of nonsusceptible organisms including fungi, which occurs occasionally, and which indicates this drug should be discontinued and appropriate therapy instituted. Steps should be taken to avoid masking syphilis when treating gonorrhea.



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The Woman's Auxiliary

Guest Columnist

Mrs. Ben H. Johnson, Jr.

AMA-ERF Chairman—Alabama

1 Meadow Lane

Bessemer, Alabama 35020

Since the AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION was established the Woman's Auxiliary to the Medical Association of the State of Alabama has steadily increased its contributions and this year at the National Convention our State President, Mrs. Ira B. Patton, received a National Award of Merit since Alabama raised the largest amount in our membership category of states with 1001-1500 members, our contribution \$11,632.57 representing \$8.70 per member and a 15 per cent gain over last year.

The AMA-ERF has three major projects for which money may be designated.

1. Funds for Medical Schools: The funds for medical schools are unrestricted grants that may be used to help pay faculty salaries, to buy modern laboratory equipment, library materials, may be used for building improvements, or may provide an emergency fund. Dr. S. Richardson Hill, Jr., Dean of the Medical College of Alabama expresses deep appreciation for our work in ERF, and especially for the funds designated for the Medical College of Alabama. I urge all of you to designate the medical school you wish to receive your contributions, if you do not they are pooled and divided among the many approved medical schools in the United States. It is the plan and ambition of our medical college to increase its enrollment from 80 to 100 students, many of us have sons and daughters who wish to enroll in our fine

medical college, let us all help make it possible to provide a place for them.

2. Loan Guarantee Fund: One out of every six medical students, interns, and residents has received at least one ERF LOAN. An average of 600 loans a month have been made since 1962. The recipient may borrow up to \$1,500 a year every year he is in full time training. Last year 76 Alabama medical students, interns, or residents benefitted from this loan fund.

3. The Institute of Bio-Medical Research: This is new, is located at the AMA headquarters in Chicago, and it is here that leading scientists work together to probe the living cell and learn more about its functions as well as malfunctions.

PROJECTS—This is the only money making committee that the National Auxiliary sponsors and the projects are varied.

a) Memorials—this continues to be very popular and all through the summer contributions have been coming in. Many doctors' wives have asked if Memorials for others than doctors are appropriate. They certainly are and should be widely used in lieu of flowers, especially in these times when many fund raising agencies are also urging the use of memorials. This should head the list of ways to help our ERF FUND.

b) Jewelry—an attractive charm bracelet with the Caduceus Charm or our lovely

(Continued on Page 337)

ANNOUNCING a potent combination in
truly delicious orange-flavored forms:
ERYTHROCIN[®]-SULFAS

ERYTHROMYCIN ETHYL SUCCINATE—TRISULFAPYRIMIDINES



in
chewable
tablets

in granules
for oral
suspension

When combination antibiotic
therapy is indicated...



CONSIDER: an exceptionally high cure rate in susceptible infections

The rationale: When combined, Erythrocin and the trisulfapyrimidines (triple sulfas) are indicated in infections that are more susceptible to the combination than to either agent alone. Such conditions are usually found in urinary, lower respiratory tract and chronic ear conditions.

The results: Clinical studies involving 142 young patients showed *an overall cure rate of*

96.5%. Side effects were experienced by only four of the patients.

The acceptance: The majority of the 142 patients studied expressed a definite liking for the products. *There were only two refusals.* An independent taste-test with 50 healthy children further substantiated the excellent acceptability of the orange-flavored forms.

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ERYTHROCIN®-SULFAS
ERYTHROMYCIN ETHYL SUCCINATE-TRISULFAPYRIMIDINES

In Chewable Tablets
In Granules for Oral Suspension



ERYTHROCIN-SULFAS

Brief Summary

Indications: Use Erythrocin-Sulfas in infections more susceptible to the combination than to either agent alone. These are usually found in urinary, lower respiratory tract, and chronic ear infections.

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or new born infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions: Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

If a reaction or overgrowth of nonsusceptible organisms occurs, withdraw the drug.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. each of sulfadiazine, sulfamerazine and sulfamethazine. 603303



THE WOMAN'S AUXILIARY

(Continued from Page 334)

State Charm in gold or silver, compacts and lighters with a handsome emblem, Caduceus cuff-links are stunning and all these items make lovely gifts at any time and may be ordered by forwarding your request to me, and delivery on most items can be immediate as I have a large supply on hand.

c) The Sharing Christmas Card—many county auxiliaries use this instead of sending greeting cards to each other—when you are approached for a donation, be generous for this is such an important phase of auxiliary work.

d) Purchase of personal Christmas cards, plastic-coated AMA-ERF playing cards, note-paper, etc., are more of the ways we raise money.

We have a large quota as the national quota is \$500,000 for the coming year. In order to meet our share of this, each doctor's wife is asked to contribute a minimum of \$10. Believe it or not, there are many who do not know about AMA-ERF, and if we had one hundred per cent co-operation of all the doctors and their wives our ERF FUND would go well over the \$15,000 goal that is set for this year.

Make a generous tax-deductible contribution for your wife now. Your support is needed and will encourage others.

What Price Quality in Drugs?

We all know that it is illogical to expect a research-oriented company, that commits itself to the discovery of drugs that are needed as well as to the making of those that are popular, to meet the prices of the firm that doesn't. It is a mistake to expect the firm that employs two quality control technicians for every five employees to match the economic tricks of the company that does not.—C. Joseph Stetler to annual Mountaintop Medical Assembly, Waynesville, North Carolina, June 18, 1966.



Give-Away Government On The Go-Go?

If Alabama physicians need any new incentive to join the battle against socialized medicine, they need look no farther than a recent memorandum issued by COPE, the Committee on Political Education of the AFL-CIO. COPE warns that in its opinion the 1966 Congressional election will herald a "new wave of liberal laws," and could determine whether it will end liberal strength in Congress for years to come.

According to COPE, defeat of some or all liberals elected in 1964 would serve as a warning that the voters want Congress to proceed more prudently in the future. COPE calls for total political effort to elect liberals in 1966 with the admonition that if organized labor is not successful it "can write off legislative progress for years to come." Victory on the other hand would give liberals approval to "use the break-throughs of the 89th Congress as a launching pad toward higher achievement in the future."

There are ample indications that the pub-

lic already has become disenchanted with Medicare and will look with an even more jaundiced eye upon extension of this give-away program by the States through Title XIX implementation. In fact, the New York Legislature already has back-tracked in its law which would have extended taxpayers' largess to recipients earning in excess of \$6,000 yearly.

As BIPAC, the Business-Industry Political Action Committee, points out, the inference from the COPE memorandum is clear. With organized labor politics is a continuing day-to-day job, not confined to the time limits of the political campaigns.

It has been noted that a shift of less than 25 Congressional seats one way or the other will turn the tide in Washington. For Alabama physicians the answer is crystal clear—joint membership in ALAPAC-AMPAC. Just the minimum effort by every practicing physician can reverse the present trend of give-away government.

Association Loses A Capable Executive

The Journal notes, with a tinge of sadness, the departure for greener pastures of Mr. William Venton Wallace, who served the Medical Association of the State of Alabama faithfully and ably for nine years. At the time of his resignation Mr. Wallace held the position of Executive Secretary, to which he was named on October 23, 1963.

Dub, as he was affectionately known by his many friends both within and without the

medical field, was a gentle young man of highest moral character. He brought with him to the Association a reputation for integrity and competence which greatly enhanced the public image of this organization.

His ability to merit and retain the confidence of the members will serve him well in his new position with the Medical Association of Georgia, where he will concentrate
(Continued on Next Page)

his efforts on liaison duties with county medical societies of that State.

A native of Decatur, Alabama, Dub was graduated from the University of Alabama as a journalism major, and came to work with MASA a short time afterwards as assistant executive secretary. During his tenure he was active in the Medical Society Executives Association, the Interprofessional Council and numerous other medical and paramedical

groups. His chief duty of late, in addition to administrative responsibility, has been as staff assistant to the Public Relations Committee.

While Dub's departure from Alabama fills us with regret, we wish him well in his new endeavors and congratulate the Medical Association of Georgia upon an excellent choice.

—L. P. P.



Future Legislature Deserves Immediate Attention

The 1966 Special Session of the Alabama Legislature, like those of 1965, must be rated as a successful one for the Medical Association of the State of Alabama—although there were harbingers of trying times ahead. The most disturbing note came when the chiropractors and optometrists combined forces to block a medical bill until it had been compromised to their satisfaction.

This is not to state that the doctors in the grassroots have lost the ability to educate their local legislators on the merits of bills designed to protect the public health. But it is a disturbing indication that forces in opposition to Medicine are testing their own strength and have been able—at least in the 1966 special session—to lodge a stranglehold on a medical bill in which they had not the slightest personal or professional interest.

Dr. Ira L. Myers, State Health Officer, who had submitted the proposed bill (House Bill 118) to enable him to get along with the task of long-range health planning for Alabama when necessary Federal legislation is enacted, is to be congratulated for exercising patience and restraint in his dealings with the chiropractors and optometrists. Despite his assurances that the bill had no effect on the clinical practice of even the medical profession,

the two groups insisted that it be amended to exempt their practice from its provisions.

The amendments accepted by Dr. Myers had no effect on the bill except to spell out in detail a fact which was not even under consideration. One other amendment, more meaningful, would have placed an optometrist on the Advisory Board. This one was rejected by Dr. Myers with such vigor that the optometrists quickly abandoned the proposal.

When Medicine's leadership was apprised of the threat to House Bill 118 by the chiropractors and optometrists they went to work in their counties and senatorial districts, contacting their senators and explaining the true intent of the bill.

The logjam was quickly shattered, and House Bill 118 went on its merry way to passage.

With a new Legislature taking office in January, 1967, it is not too early for physicians to take a critical look at the slate of candidates, work and vote for the most capable applicant, and then launch a broad program designed to make themselves and the objectives of Medicine thoroughly familiar to all concerned.

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understanding... precedes development

The synthesis of cortisone was accomplished by Merck Sharp & Dohme in 1948—the famous “Compound E” used by Dr. Philip Hench in his historic experiment at the Mayo Clinic.

But proud as we are of our role in the development of cortisone and subsequent corticosteroids, we have continued to seek a greater understanding of arthritic disorders

and new drugs for their treatment.

One such drug—INDOCIN® (indomethacin), a nonsteroid, anti-inflammatory agent fundamentally different in structure and activity from other drugs in use—was recently made available for the treatment of arthritic conditions. It opens new possibilities for the long-term management of arthritis and inflammatory disease.



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INDOMETHACIN

Indications: Chronic and acute rheumatoid arthritis, rheumatoid (ankylosing) spondylitis, degenerative joint disease (osteoarthritis) of the hip, and gout.

Contraindications: Active peptic ulcer, gastritis, regional enteritis, or ulcerative colitis. Safety in pregnancy has not been established. Not recommended for pediatric age groups.

Warning: Patients who experience dizziness, lightheadedness, or feelings of detachment on INDOCIN should be cautioned against operating motor vehicles, machinery, climbing ladders, etc. Use cautiously in patients with psychiatric disturbances, epilepsy, or parkinsonism.

Precautions and Adverse Reactions: Most commonly, headache, dizziness, lightheadedness, G.I. disturbances. The C.N.S. effects are often transient and frequently disappear with continued treatment or reduced dosage. The severity of these effects may occasionally require cessation of therapy. G.I. effects may be minimized by giving the drug with food or with antacids or immediately after meals. Ulceration of the stomach, duodenum, or small intestine has been reported and, in a few instances, severe bleeding with perforation and death. Gastrointestinal bleeding with no obvious ulcer formation has also been noted; INDOCIN should be discontinued if G.I. bleeding occurs. As a result of G.I. bleeding, some patients may manifest anemia, and for this reason periodic hemoglobin determinations are recommended. Rare reports of effects not definitely known to be attributable to INDOCIN include bleeding from the sigmoid colon (either from a diverticulum or without a known previous pathologic condition), perforation of preexisting sigmoid lesions (diverticulum, carcinoma), and hematuria. In other rare cases, a diagnosis of gastritis has been made while the drug was being given. One patient developed ulcerative colitis, and another, regional ileitis, while receiving INDOCIN; when the drug was given to patients with preexisting ulcerative colitis, there was an increase in abdominal pain. Infrequently observed side effects may include drowsiness, tinnitus, mental confusion, depression and other psychic disturbances, blurred vision, stomatitis, pruritus, edema, and hypersensitivity reactions. Slight BUN elevation, usually transient, has been seen in some patients, although the preponderance of evidence indicates that INDOCIN does not adversely affect renal function, even in patients with preexisting renal disease. Nevertheless, renal function should be checked periodically in patients on long-term therapy. Leukopenia has been seen in a few patients. Transient elevations in alkaline phosphatase, cephalin-cholesterol flocculation, and thymol turbidity tests have been observed in some patients and, rarely, elevations of SGOT values; the relationship of these changes to the drug, if any, has not been established. As with any new drug, patients should be followed carefully to detect unusual manifestations of drug sensitivity. Before prescribing or administering, read product circular with package or available on request.

LETTER TO THE EDITOR

August 20, 1966

William L. Smith, M. D.
Editor, Journal of the Medical Association
of the State of Alabama
19 South Jackson Street
Montgomery, Alabama

Dear Dr. Smith:

Thank you and congratulations on your excellent editorial in the August 1966, issue of the Journal regarding the Individual Responsibility Program.

You might be interested to know that the three counties of Baldwin, Mobile and Monroe have been on the Individual Responsibility Program for 2 months. With few exceptions it has proved quite satisfactory and has been well accepted both by the physicians, by the patients and by most insurance companies.

I firmly believe that our only hope in the preservation of the private practice of medicine is through some such program as this.

I am enclosing for your information copies of several Individual Responsibility forms which I have in my files. I hope that they might be helpful to you personally and to any one else who may be interested.

In closing, I believe that another verse from the Rubaiyat is also appropriate:

"I sent my soul into the invisible
Some measure of that after-life to
tell

And by and by my soul turned to me
And answered 'I, myself, am heaven
and hell'."

The physician who does not adopt the Individual Responsibility approach will indeed find the socialists demons of hell taunting his soul.

Again, thank you for a fine editorial.

Sincerely yours,

NEAL S. FLOWERS, M. D.

what time is it?

For the past
two years
there's been
one new case
of active tuberculosis
reported for every
four thousand
of U.S. population.

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Twenty Years of Hill-Burton—A Tribute to the Honorable Lister Hill

The Medical Association of the State of Alabama wishes to pay tribute to its most famous son, the Honorable Lister Hill of Montgomery, who has served the Congress of the United States for over forty years. He is the distinguished author of the Hospital Survey and Construction Act of 1946, commonly known as the Hill-Burton Program. During these two decades the Hill-Burton Program has helped to finance 8,271 projects which have provided 353,500 hospital beds. The federal government has given \$2.5 billion toward construction projects that cost over \$8 billion.

There is hardly a hospital in this state or in this nation, either public or private, which is not partly built or enlarged with Hill-Burton money.

Senator Lister Hill, who is named for the famed British surgeon, Lord Joseph Lister, has played a far greater role in the advancement of health and allied sciences than any other person in the health field in the United States. His interest can be traced back to his childhood as he was the son of a pioneer surgeon of Montgomery, Dr. L. L. Hill.

It is interesting to note that between 1928 and 1938 nearly 800 hospitals went out of business. You can imagine what this would mean with the steadily increasing population and with the ratio of hospitals to people being reduced, especially in rural areas.

The Commission on Hospital Care was organized in October 1944 and instructed to make a study of the hospital needs in the United States. Following this study, the Hill-Burton program was initiated when President Truman signed the Hospital Survey and Construction Act on August 13, 1946. This legislation authorized federal grants to assist

states and communities in constructing needed hospitals and public health centers to furnish adequate care to all their people.

This legislation gave impetus to (1) Federal-State partnership in administration; (2) Planning; (3) Constructive standards; (4) Methodology for determining need; (5) Improved operation of health facilities; and (6) Better distribution of facilities.

In 1949 and again in 1954 the program was enlarged. Grants were made available for research, experimental constructions and demonstrations showing how hospital services, facilities and resources could be used more effectively. In 1961, additional funds were authorized to support research and to aid in the construction of nursing homes. Other legislation came in 1964 with the Hospital and Medical Facilities Amendments. This legislation was popularly known as the Hill-Harris Amendments, and it established a five year \$1.34 billion program for new construction and modernization of hospitals and facilities for public health, diagnosis and rehabilitation as well as others providing long term care.

This 1964 legislation also authorized additional funds for construction of long term care facilities. These amendments also marked a decided shift in emphasis for Hill-Burton Program which had hitherto favored rural areas. Now for the first time funds were earmarked specifically for modernization of existing health facilities and, in addition, the law stipulated that special consideration be given to densely populated areas.

Senator Hill has received many honors for his leadership in health legislation. Among

(Continued on Page 345)

Frankly, most antihypertensives are pretty good if you give an adequate dose. I'm looking for one with a simple regimen so that mix-ups in doses and therefore the chance of side effects are minimized.



Regroton®

chlorthalidone 50 mg. reserpine 0.25 mg.

**1 tablet daily
brings pressure down**

Advantage: Both components of Regroton are long-acting.

Average dosage: One tablet daily with breakfast.

Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.

Warning: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.

Side effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness.

For full details, see the complete prescribing information.

Availability: Bottles of 100 and 1000 tablets.

Geigy

TWENTY YEARS OF HILL-BURTON

(Continued from Page 343)

them are the first General William Crawford Gorgas Award; the first Health "USA" Award; the Albert Lasker Award for Medical Research; the Alexander Graham Bell Association for the Deaf Award; the Arthritis and Rheumatism Foundation and the American Rheumatism Association Award. Senator Hill is also the recipient of the Honorary Doctor of Law Degrees from Auburn, Columbia, Alabama, Washington, St. Louis, Pennsylvania, and Woman's Medical College. In addition, he has received Honorary Doctor of Science Degrees from Hahnemann Medical College and New York Medical College. Senator Hill is a distinguished public servant who has served this nation for over forty years, and the people are extremely proud to have such a distinguished public servant coming from the great state of Alabama.

It is astounding that under this program 104 general hospitals have been built in Alabama and 12 more are under construction. Seventeen others have been approved for construction, and this totals 8,694 in patient beds provided. While the Hill-Burton funds are not restricted to hospitals, they have been the chief beneficiaries. However, other facilities such as public health centers, public health laboratories, schools of nursing, mental hospitals, tuberculosis sanitariums, diagnostic and treatment centers, nursing homes, chronic disease hospitals and rehabilitation centers have been built under this program.

Federal funds allocated to Alabama under the Hill-Burton program during the two decades of its existence total nearly \$88 million. Matched with state and local funds, facilities have been built costing nearly \$159 million.

During the twenty years of the Hill-Burton Bill, federal grants totaling \$87,643,768 have been made in Alabama and have stimulated construction of 296 health facilities at a total

cost of \$158,814,000. It is interesting to note that the first hospital grant was made to the George H. Lanier Memorial Hospital in Langdale on November 5, 1947. In Alabama, as in every other state comprehensive planning has been the keynote of the Hill-Burton program. Each state was required to survey its health facilities and to develop a state plan. This state-wide planning has resulted in a much better distribution of hospitals and health facilities. The allocation of federal funds has been delegated to the State Committee on Public Health which receives the recommendations of the Bureau of Health Medical Facilities Construction. There are many criteria which must be made before allocation of funds may be made. There is a distinct need for modernization with particular reference to the large hospitals in our big cities. These are the hospitals upon which we rely for specialized hospital services and for a tremendous conduct of research. These are the areas where we must train our future physicians, our nurses and our other health professionals.

It is undoubtedly true that, with the advent of medicare, there will be an increasing need for the training of future physicians, and it is most probable that allocations may become necessary from federal funds for the planning and building of new medical schools in the immediate future. To keep up with the expanding population growth, there is a need for at least a 25 per cent increase in the number of physicians who must be graduated from medical schools. This is a challenge which we must face; and since it does take 8-10 years to develop a medical school, time is of great importance.

Again the Medical Association of the State of Alabama is extremely proud of its most prominent citizen and benefactor, the Honorable Lister Hill of Alabama.

—M. Vaun Adams, M. D.

Norinyl[®] tablets

(norethindrone 2 mg. \bar{c} mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

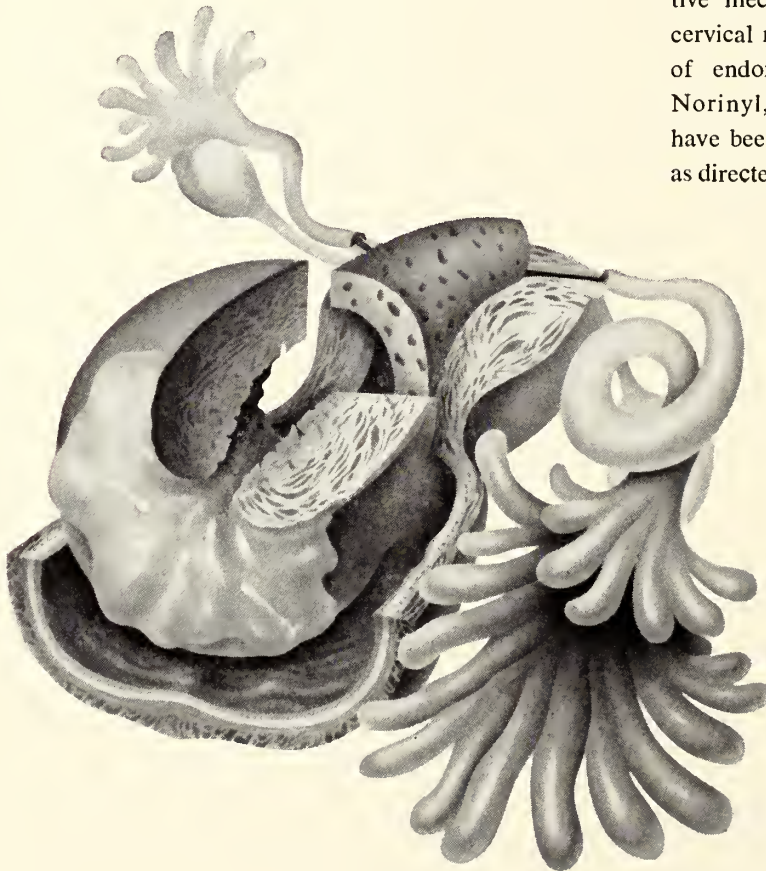
**inhibition of ovulation by means of
2 time-proved hormonal agents**

**production of a cervical mucus hostile to
sperm motility and vitality**

**creation of an endometrium unreceptive
to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W. Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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Norinyl[®] tablets
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for multiple contraceptive action

**When
thiazide
or
reserpine
alone
won't
keep**

**BLOOD
PRESSURE
DOWN**

Establish and maintain early, more decisive control of blood pressure

DIUTENSEN-R[®]

Cryptenamine 1.0 mg.* Methyclothiazide 2.5 mg. Reserpine 0.1 mg.

When blood pressure won't stay down despite initial therapy — when complaints of headache, fatigue or dizziness are often voiced — it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine *plus* cryptenamine — a rational, comprehensive therapy to help establish and maintain early, more decisive control of blood pressure.

The cryptenamine in DIUTENSEN-R helps improve normal vasodilating reflexes while the thiazide and reserpine components maintain vasorelaxant, sedative, and saluretic benefits. Cryptenamine lowers pressoreceptor reflex thresholds (which may be abnormally high in hypertension) — “resets” pressoreceptors to function at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

“...quite apart from the problem of vascular damage, there arises a possibility of virtual ‘cure’ or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive.”

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice 1966-67*, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals.

However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars. **Side effects and**

precautions: The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout symptoms and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon.

DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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Guest Editorial....

Management of Time Is An Acute Problem

The physician continues to face a problem in managing his time. He seems to become busier and busier, and yet he knows he needs some time to himself to refresh his professional knowledge.

The average physician is now working a 58-hour week, and many of us are putting in hours far above that number. How, then, can we find the time to study and keep abreast of new medical knowledge?

One of the best and most efficient methods of checking up on new developments is to attend the annual Clinical Convention of the American Medical Association. It will be in Las Vegas this year, November 27-30.

For the 20th consecutive year, the AMA is bringing this impressive collection of new clinical knowledge to the practitioner. The Clinical Convention is designed primarily for the man in practice. The speakers will read papers that will bring to the practitioner the latest findings of others in his area.

Particularly noteworthy are the postgraduate courses—expanded to three topics this year—on fluid and electrolyte balance, cardiovascular disease, and obstetrics and gynecology. Each course will consist of three half-day sessions, each led by stimulating teachers.

Other sessions will be devoted to timely subjects, followed by question-and-answer or discussion periods. Breakfast roundtables will provide further time for informal discussion. An outstanding program of medical motion pictures and medical color television will again be a convention feature.

The Clinical Convention promises to be a stimulating four days, worthy of the busy physician's time. I urge every physician to take advantage of this educational opportunity.

Charles L. Hudson, M. D.
President,
American Medical Association

Founded in 1904

HIGHLAND HOSPITAL, INC.

ASHEVILLE, NORTH CAROLINA
Affiliated with Duke University



A non-profit, psychiatric institution, offering therapeutic milieu, group and individual psychotherapy, and standard somatic treatments. Limited day-patient and out-patient services. The hospital is located in a 75-acre park amid the scenic beauties of the Smoky Mountain Range of Western North Carolina, affording exceptional opportunity for physical and emotional rehabilitation.

Contact: Medical Director, Highland Hospital, Asheville, N.C. 28801



Dr. Mertins Named to Board of Trustees

Dr. Paul S. Mertins of Montgomery has been named to the MASA Board of Trustees representing the Second Congressional District, succeeding Dr. William A. Daniel, Jr., who has moved his residence to Birmingham.

The term of Dr. Mertins will expire in April, 1967.

A native Montgomerian, Dr. Mertins received his BA degree from Washington and Lee University in 1929, and his MD degree from Columbia College of Physicians and Surgeons in 1933. His residency was served at Massachusetts Eye and Ear Infirmary.

From 1941 until 1945 he served in the Army and Air Force, being discharged with the rank of lieutenant colonel. During this tenure he held the post of Army Service Chief of Ear, Nose and Throat of the Ninth General Hospital in the Pacific, and later was consultant for the Air Surgeon on airotitis.

Dr. Mertins was president of the Medical Society of Montgomery County in 1954 and headed the Alabama Association of Ophthalmologists and Otolaryngologists in 1964.

He was married in 1942 to the former Ann Moss of Birmingham. They have five children.

His medical society affiliations include the American College of Surgeons, the Interna-



Dr. Paul S. Mertins and President J. O. Finney

tional College of Surgeons, the American Academy of Otolaryngology, the Trilogical Society and the Southern Medical Association.

Dr. Daniel, a charter member of the Board of Trustees, was born at Thomaston, Georgia, in 1914. He moved to Montgomery in 1942. He received his BS degree from Northwestern University in 1936 and his MD degree from the same institution four years later. He served his residency at Charity Hospital, New Orleans, and later did pediatric specialty

(Continued on Page 355)

Patterson New Executive Director; Ingram Joins Staff

Top level management of the central office of the Medical Association of the State of Alabama changed September 11 when L. P. Patterson, Director of Legislative Affairs and Publications, was named Executive Director to fill the vacancy created by the resignation of William V. Wallace.

Named to succeed Mr. Patterson, as Assistant Executive Director, was Robert B. (Bob) Ingram, long-time State Capitol reporter and political editor for the Montgomery Advertiser.

Mr. Wallace resigned August 17, 1966, to accept a position with the Medical Association of Georgia as liaison representative between the central office of that State and county medical societies. He was associated with the Medical Association of the State of Alabama for nine years, succeeding William A. Dozier, Jr., as Executive Secretary on October 23, 1963.

Mr. Patterson came to the Association October 1, 1964, as Assistant Executive Secretary and managing editor of The Journal. He was assigned as staff assistant to the Committee on Legislation, the Committee on Aging and the Indigent, and the Committee on Insurance. As the legislative workload became increasingly heavy he was relieved of the Insurance Committee assignment.

In August, 1966, Mr. Patterson's title was changed to Director of Legislative Affairs and Publications. In his new position he will retain responsibility for The Journal, Alabama MD and other publications temporarily to permit Mr. Ingram to familiarize himself with his new duties.

Born in Andalusia, Alabama, March 28, 1916, Mr. Patterson was engaged in newspaper work for more than a quarter of a century. He came to MASA from the Montgomery Advertiser, where he had served as managing editor for seven years. Prior to that



L. P. Patterson

Robt. B. Ingram

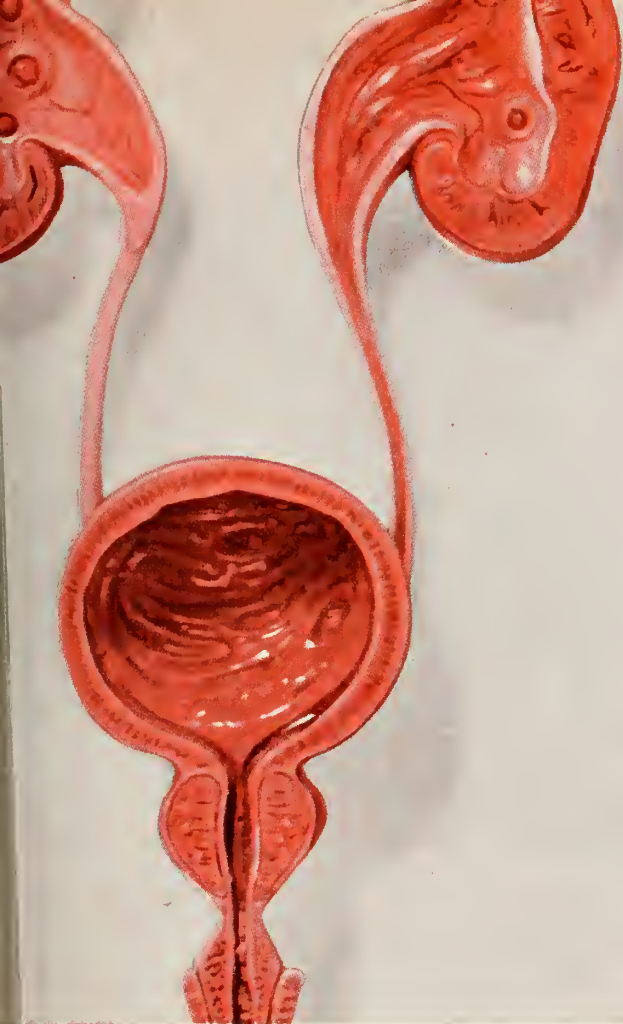
time he was managing editor of the Dothan Eagle and the Columbus (Ga.) Ledger. During World War II he was Chief of Public Relations for the Army Fourth Service Command, comprising eight Southeastern States, from 1941 until 1943. He later held the position of Director of Public Relations at Grady Memorial Hospital in Atlanta.

Mr. Patterson is married to the former Bernice Rahn, a Registered Nurse, of Valdosta, Georgia. They are the parents of one son and one daughter, and have one grandson.

Born at Centre, Alabama July 31, 1926, Mr. Ingram was a Marine during World War II, later graduating from Auburn University with a BA degree in English. He joined the Advertiser staff in 1953 and has been assigned to the State Capitol for the past 12½ years.

Married to the former Edith Ragan of Centre, they have three children. He has been active in scholastic, civic and religious affairs, currently serving as teacher of an adult Sunday School class and as a member of the South Montgomery YMCA Athletic Committee.

In addition to his duties with MASA, Mr. Ingram also inherits another position formerly held by Mr. Patterson. By vote of the Board of Directors he was named Executive Director of ALAPAC on September 10, 1966.



Diagnosis:

**cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?**

**in any case,
usually gram-negative***

Therapy:

two 500 mg. Caplets® q.i.d.
(initial adult dose)

cautions: Urinary tract infections caused by gram-negative and some gram-positive organisms.

effects: Mainly mild, transient gastrointestinal disturbances; in occasional instances, drowsiness, fatigue, pruritus, rash, urticaria, mild leukopenia, reversible subjective visual disturbances (overbrightness of vision, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), and reversible photosensitivity reactions. Excessive dosage, coupled with certain predisposing factors, has produced convulsions in a few patients.

cautions: As with all new drugs, blood and liver function tests are advisable during prolonged treatment. Pending further experience, like most therapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or impairment of kidney function. Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not arbitrarily be doubled unless under the close supervision of a physician. Bacterial resistance may develop.

When testing the urine for glucose in patients receiving NegGram, Clinistix® or Tes-Tape® should be used since other reagents give a false-positive reaction.

dosage: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times daily) for one to two weeks. Thereafter, if prolonged treatment is indicated, dosage may be reduced to two Gm. daily. Children may be given approximately 25 mg. per pound of body weight per day, administered in divided doses. The dosage recommended above for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Until further experience is gained, infants under 1 month of age should not be treated with the drug.

supply: Buff-colored, scored Caplets® of 500 mg. for adults, conveniently available in bottles of 56 (sufficient for one full week of therapy) and in bottles of 100. 250 mg. for children, available in bottles of 56 and 100.

reference: (1) Based on 23 clinical papers, 1512 cases. Bibliography on request. (Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: Microbial Agents and Chemotherapy - 1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

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DR. PAUL MERTINS NAMED TRUSTEE

(Continued from Page 351)

work at Texas Children's Hospital, Dallas, and Children's Memorial Hospital, Chicago.

His medical society affiliations include the American Academy of Pediatrics, American Cerebral Palsy Association, American Medical Association, Southern Medical Association and Medical Association of the State of Alabama.

He was married to the former Jean Kimball of Winder, Georgia, in 1939 and they, also, are the parents of five children.

Dr. Daniel has closed his practice in Montgomery to accept the position of Professor and Director of the Adolescent Unit of the Pediatrics Department at the University of Alabama Medical Center.

Genetic Counseling

Health departments are rapidly becoming involved in the growing field of genetic disease and more of them are employing full-time geneticists. The geneticist is responsible for genetic counseling of families referred by physicians, clinics, and local health and welfare departments. Current publicity on genetic disease is motivating people to seek advice on their own genetically derived problems. When a child in the family has a genetically determined disease, parents are concerned about the possibility of producing another defective child. Lack of understanding and misdirected guilt can affect family harmony. To be of help, the counselor must be a patient and sympathetic listener and must have sufficient psychological education and experience to appreciate the emotional problems involved. In addition, the physician responsible for the health department's part of the program should ideally have considerable training in medicine, pediatrics, and medical genetics. ("Health Department and genetic counseling," in *Currents in public health*, November-December 1965).

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Annual Report On Medical Licensure

A total of 7,911 physicians were newly added to the licensed medical profession in the U. S. in 1964, according to the report by the AMA Council on Medical Education.

There were 6,605 newly licensed U. S. and Canadian medical school graduates and 1,306 graduates of medical facilities in other countries. Newly licensed foreign medical graduates have gradually decreased each year since the high of 1,626 in 1959. In recent years, about one quarter of foreign-trained graduates issued first licenses have been U. S. citizens who attended medical schools outside the U. S. and Canada.

A total of 17,885 licenses to practice medicine and surgery were issued during 1964 by 55 authorized boards in the U. S. and its territories. This total included first licenses for new physicians, licenses for physicians moving to other states, and licenses for foreign-trained physicians.

Of all licenses issued during 1964, 7,166 were granted after successful written examination and 10,719 by reciprocity and endorsement of state licenses or the certificate of the National Board of Medical Examiners.

As of Dec. 31, 1964, there were 284,271 physicians in the U. S. (excluding 1,740 temporarily in other countries).

Licensing board examination failures in 1964 totaled 1,181. The percentage of failures in the written examinations of graduates of approved U. S. medical schools was 1.7; of graduates of approved Canadian medical

schools, 7.8% failed. Graduates of schools of osteopathy admitted to medical licensure examination in several states had 9.4% failures, and 31.8% of foreign-trained physicians examined for medical licensure failed. The total percentage of failures was 13.4%, about the same as 1963.

A second section of the Council's report pertains to examination results and endorsement of credentials sponsored by 24 boards of examiners in the basic sciences in 23 states and the District of Columbia.

A third section deals with examinations given by the National Board of Medical Examiners. In 1964, the District of Columbia, Guam, Puerto Rico and 42 state boards issued 4,730 licenses to practice medicine on the basis of endorsement of the National Board certificate.

The fourth and concluding section of the report summarizes results of examinations given to foreign-trained physicians by the Educational Council for Foreign Medical Graduates.

The report was compiled by the AMA staff under the supervision of Walter S. Wiggins, M. D., secretary of the Council; A. N. Taylor, Ph. D., associate secretary, and Henry R. Mason, M. P. H., assistant secretary.

W. Clarke Wescoe, M. D. chancellor of the University of Kansas, is chairman of the Council on Medical Education. Warde B. Allan, M. D., Baltimore, Md., is vice chairman.



SECOND LOOK AT NEW DRUG LAWS?

Many economists are convinced that the American system of patents and trademarks and brand names has been a vital factor in the great progress of the United States and its leadership in establishing a standard of living superior to that anywhere else in the world. The factors involved include not only this system but also the right to advertise, the right to disseminate information, and the right to legitimate pride in distributing as widely as possible the benefits of new inventions and discoveries. How much time must pass before the ultimate effects of the new (drug) legislation become apparent is difficult to predict. The effects are only beginning to be felt. Perhaps the time is near when the legislators will have to take a second look.—Morris Fishbein, M. D., in *Postgraduate Medicine*, (39:205-206), February 1966.

Public Relations and the Medical Society

by

John M. Chenault, M. D.

Decatur, Alabama

Medical societies across the country are constantly dealing with public relations and are thereby affecting medicine's image, whether they realize it or not. There are only two kinds of public relations—good and bad. Good public relations must be a continuous effort. You cannot turn it on and off like a water faucet. The tides of public opinion are strong and shifting. While it is possible to harness them under certain circumstances, nothing can stand against them when they are whipped into the full fury of a hurricane force. The public which worships at your feet today may rise up tomorrow and lynch you.

Our primary concern is with the means by which medical societies can take advantage of public relations opportunities to enhance the image of the profession and to win friends for medicine.

All of us know that community projects should not be developed solely for the purpose of reaping public relations benefits. Public service programs, such as health fairs, immunization and disease detection projects, accident prevention, emergency call services, and a host of others, should be undertaken because they benefit people. However, the society which does not capitalize on the public relations values inherent in such projects is failing to take advantage of its opportunities.

The basic responsibility of the medical society in public relations is two-fold. First, the society must present to the people positive evidence that the profession is dedicated to the public welfare. Second, the society must encourage its members to be thus dedi-

cated. If the individual physician is committed to serving those who need him, if the medical society of which he is a member is no less devoted to public service, and if every available means is used to tell the story, there will be no public relations problem.

Two of the more important medical society long-range programs that can enhance medicine's image are properly functioning grievance committees and well-supported emergency call services.

Grievance committees—or mediation committees or whatever the designation—should be created and their duties carried out in a spirit of public service. If they operate in an atmosphere of secrecy and silence, their value is substantially diminished. A grievance committee which approaches its task openly, with courage and impartiality, inviting patients to air their grievances against physicians, can effectively demonstrate the capacity and the willingness of the profession to discipline itself in the public interest. The public relations should be obvious. An excessive or exorbitant fee adjudicated to the satisfaction of the patient through the instrumentality of a grievance committee may or may not help the offending physician, but it most certainly will elevate the stature of the profession as a whole. It is also possible that an inarticulate physician, unable to cope with an aggressive or hostile patient with a fancied grievance, may find a valuable friend in a fair and impartial grievance committee which may even keep him out of court. Conversely, a timid and uncertain committee, or one which views itself as the physicians' protector, can compound the public relations problems it should be helping resolve.

Emergency call systems, however they vary in operation from one area to another, all

Text of address delivered to the Public Relations Institute sponsored by the American Medical Association, Chicago, Illinois, August 25, 1966.

serve the same basic purpose—to guarantee availability of medical care in a true emergency when the patient has no family doctor or his doctor refuses to respond or cannot be located. At least three ingredients are essential to an effective emergency call service—a roster of physicians sufficient to provide 24 hour service, a number to call, and continuing publicity. I am sure there are many emergency plans in existence which are unknown to the general public, thus defeating their purpose. However, if a plan is actively supported by members of the society and if it is given widespread and continuing publicity, it can be of great benefit to the public and can yield tremendous public relations dividends to the profession. A well-organized, well-publicized emergency system may not bring people into the streets shouting hosannas for the medical profession, but it can prevent that cynical headline which says in effect that doctors are too callous to care.

Publicizing emergency call services also provides the medical society with an opportunity to impress upon the people the value of finding a family doctor before an emergency arises. This should be emphasized at frequent intervals, and concurrently the society should explain why patient care is better in the doctor's office than it is in the patient's home. There still is too much public misunderstanding on this matter. You and I know that it isn't a Hobson's choice, that it's better for the patient, both medically and economically. But too few patients understand. A good public relations project in this area could alleviate some of the discontent.

Explaining the rising costs of medical care is a continuing problem. Many state and county medical societies act as if the middle name of the AMA is "George," and are perfectly willing to "let George do it." Medical societies should join the AMA in doing more to acquaint the public with the facts about the cost of medical care. It is high. There's no use trying to kid anybody about that. And it's going higher. But it is a fact that medicare is a better bargain today in many respects than it ever has been. It is also a

fact that physicians' fees have risen less than most other goods and services the people buy. There is a positive and constructive bit of public relations work here that should be done more aggressively because, as Dr. Wolfe pointed out, only 12 per cent of the people believe doctors try to keep their charges as low as possible. Most people would agree that a businessman, whether he deals in goods or services, is entitled to a reasonable profit—and they would probably define profit roughly as money left over after all expenses are paid. I have the feeling that most people, oddly enough, equate profits in a doctor's office with sin. Our enemies have done a thorough job of brainwashing the people into the belief that doctors are money-grubbing, selfish, heartless men and women who prey upon the weak, the sick, and the afflicted. More should be done to eliminate the substantial misunderstanding about the economics of medical care.

Good press relations are fundamental to good public relations. Medical society executives and officers should be acquainted with their newspaper editors and writers and with personnel of local television and radio stations. They should try to understand these news media and their problems. They should discuss medicine's problems with newspaper men and broadcasters. They should explore, if they haven't already, the advisability of developing effective codes of co-operation between the press and physicians, not as immutable rules of conduct but as guides toward better relationships. Some societies regularly invite members of the press in to meetings to chat about mutual problems and air gripes if there are any. In Alabama, as in many other states, annual awards are given to members of the press for outstanding medical reporting, and we have found this procedure a genuine bargain.

Just a few weeks ago, when it became apparent that a majority of our state's doctors would use the direct method for billing Medicare patients, we anticipated that some antagonistic group might try to present this as a

(Continued on Page 360)

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(Continued from Page 358)

rebellion against the Medicare law, or worse, a boycott of the elderly people of Alabama. The President of the State Medical Association called a press conference in Birmingham a few days after adjournment of the AMA House of Delegates. His purpose was to explain our position on this vital issue, and to do it before anyone else had an opportunity to present an uncomplimentary version. As Nathan Bedford Forrest expressed it, "Get thar fustest with the mostest."

The press conference exceeded our greatest expectations, being attended by 17 representatives of newspapers, radio stations, and television, including the chief of the Alabama Bureau of the Associated Press. Their stories were accurate and objective.

Speaking for the medical association were six officers and committee chairmen from all parts of the state, representing general practice and various specialties. We explained the position which we expected doctors of Alabama to take and the reasons for their stand. Later we invited the press to ask questions, and they did, in large number. The conference lasted 45 minutes longer than planned. I am happy to report to you that not a single critical editorial or letter-to-the-editor has appeared in print.

Fortunately, the physicians of Alabama have always enjoyed far better-than-average public relations with the people. We are primarily—or were until a few years ago—a rural state and the family doctor has maintained a very close and intimate relationship with his patients.

It is precisely this rapport, which has provided a valuable public relations by-product—the influence of organized medicine on the state legislature. During the past year, of the more than 200 bills introduced into the legislature directly affecting public health, we were able to secure passage of every bill we sponsored and to kill every bill we seriously opposed. The members of the legislature knew that the voters in their districts trusted their doctors and had great respect for their opinions. The Senators and Representatives

knew that organized medicine had a "Court of last resort" to which we could appeal.

Some aspects of public relations are internal — intra-professional. One distressing problem, of course, is the physician who knocks his own society. More often than not, these internal critics are those who know little or nothing about the society, who seldom if ever attend society meetings, who never visit society offices, and who have never served as an officer or a member of any society committee. The place to start to whip this problem is better society meetings. They must be worth the doctors' time. Every member should be given the opportunity to participate in society affairs, preferably when he first joins. If a new physician is introduced to his society with a meal, a handshake, a cold shoulder, and nothing more, he may never return. But if his introduction is a comprehensive indoctrination program on the society and its activities and if, at the same time, he is given the opportunity to serve in some capacity, he is more likely to become friend than foe.

I often wonder whether we have sufficient liaison with our colleagues in other specialties. Do the ophthalmologists, the radiologists, the pathologists, or the physiatrists really take advantage of the binding ties which unite them with other branches of medicine? Is there rivalry or perhaps even resentment between the general practitioner and the internist or surgeon? Are specialty groups so concerned with their own specific problems that they cannot link hands with the whole body of medicine when the very future of our profession is in jeopardy? The medical society provides an excellent vehicle for promoting good intra-professional relations. Our only hope for universal good public relations is to first achieve harmony within our own ranks.

In reaching this goal we must accept the fact that we will not always agree on every issue. But we have the intelligence, and we can develop the determination, to compromise when we cannot agree, and to tolerate an actual breakdown in relationship only as a desperate and unavoidable last resort.

fall 1966

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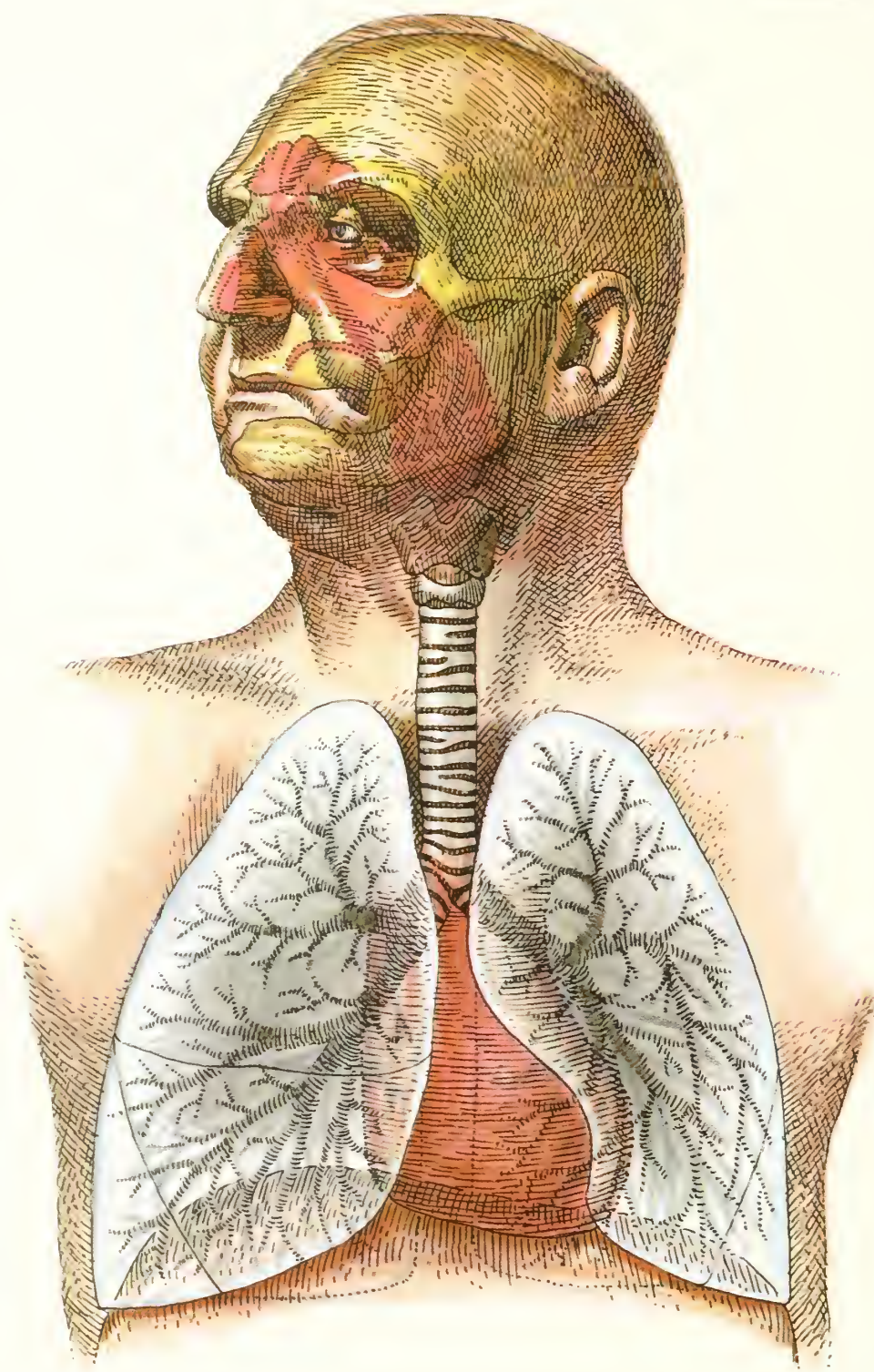
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this issue: the common cold and the aging patient

the common cold and the aging patient

Louis J. Vorhaus, II, M.D., F.A.C.P.



G. SCHWENK

Effects of aging on the anatomic and physiologic aspects of the respiratory apparatus.

The chest becomes more fixed, less mobile and less elastic as the bronchial walls and thoracic ligaments lose elasticity. The diaphragm and intercostal muscles atrophy and weaken. The lungs become smaller, flabbier and weigh less, decreasing vital and total lung capacity, increasing residual volume and the alveolar dead space.

Sir William Osler described pneumonia as the welcome friend of the aged patient, because the patient with pneumonia usually died quietly. But today, the well-informed physician is an even better friend of the aging patient, since it is better to live than to die, no matter how quietly.

One of the first avenues of approach in the control of the hazards of respiratory disease in the aging patient is prompt and proper attention to the common cold or upper respiratory infection. The common cold may be the first step in the relatively short path to lower respiratory infection, broncho-pneumonia and death. This train of events occurs frequently among older persons. Indeed, pneumonia is one of the most common causes of their admission to hospitals and ranks high on the list of geriatric killers. Colds are more debilitating in elderly people and the aged are more likely candidates for secondary infections such as sinusitis and bronchitis. These infections, in turn, are more prone to lead to broncho-pneumonia, because of lowered resistance and anatomic and physiologic changes in the lungs of the elderly.

What is different about the respiratory tree of an aged person and that of an otherwise healthy younger adult? Aging certainly takes its toll on all parts of the body, affecting both anatomic and physiologic aspects of the respiratory apparatus. These changes are in part due to the wear and tear that occurs over the years; the repeated bouts of respiratory infection, long exposure to atmospheric pollutants, to occupational inhalants, smoking, malnutrition, obesity, inactivity and the development of other diseases which may affect the lungs.

With the passage of years, the lungs change. They become scarred and emphysematous and lose their compliance. The whole chest becomes more fixed, less mobile and less elastic.

the anatomic changes that occur in aging render the lungs less efficient. Tests of pulmonary function in senescence show a deterioration characterized by a decrease in vital capacity and total lung capacity, an increase in residual volume and alveolar dead space. Maximum breathing capacity is reduced and uniformity of ventilation deteriorates. These problems are often aggravated by the obstructed breathing, fever and secondary infection associated with the common cold, placing an additional stress on the entire cardiopulmonary reserve.

In addition, the efficiency of a cough is below par in older persons even though they are in good health. This is partly due to the decreased respiratory excursions and distensibility of the chest wall, and partly from loss of elasticity of bronchial walls which tend to make them collapse in a cough.

The elderly patient's resistance to infection is often reduced. Nutritional deficiencies are more common in aged people. There is some evidence to indicate that their capacity to respond to stress is less efficient. Finally, there is often relatively meager symptomatic response to acute disease. The absence of obvious or dramatic clinical signs and symptoms of severe illness is particularly dangerous because, coming as it

(concluded on following page)

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does in a person whose defenses are weakened both locally and systemically, pulmonary disease may progress rapidly to irreversible stages before medical attention is sought. Respiratory infection is especially hazardous because the aged patient responds badly to hypoxia. Not only is his response to oxygen lack impaired, but the work of breathing, due to decreased compliance of the lung and increased stiffness of the thorax, is markedly augmented.

Many patients late in life are in a precarious and delicate cardiopulmonary balance which is easily decompensated from relatively minor insults such as colds and upper respiratory infections.

For all of these reasons, geriatricians long have stressed the importance of preventing respiratory insults. Today we have better ways of treating respiratory infection, improved techniques for clearing the lungs and bronchial tubes of secretions and better understanding of ways of improving ventilation. We possess a broader spectrum of antimicrobial agents including newer ones to deal with previously resistant organisms. Even so, the death rate from pneumonia is high in older people, and it is preferable to avoid the disease than to treat it. To do so, attention must be paid to the general maintenance of good health and all that implies, as well as to the prevention, elimination and treatment of associated conditions that predispose to or cause pneumonia such as chronic upper or lower respiratory infection, respiratory allergy, chronic sinusitis and exposure to inspired irritants.

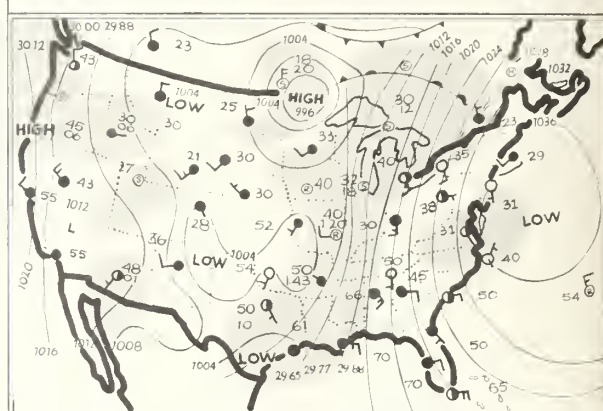
Colds and other minor respiratory infections, which favor the development of broncho-pneumonia, should be treated vigorously and promptly, particularly those patients whose aging process has been accompanied by the development of chronic pulmonary disease. Upper respiratory passages should be cleared with decongestants. Sinuses should be drained adequately. And, when indicated, appropriate antimicrobial therapy should be instituted before serious infection of the lower respiratory tree supervenes.

In decades past it was understandable that physicians welcomed pneumonia for the aged patients because it offered them a quiet and peaceful demise. Today we recognize that in many cases, peaceful as it may have been, such deaths were often avoidable. With the current knowledge and understanding of the problems that respiratory infections impose on aging people, vigilant medical attention can often

restore them to a vigorous, rewarding and productive life so that the many opportunities that exist today for people to enjoy their golden years are realized and not stolen by untimely death.

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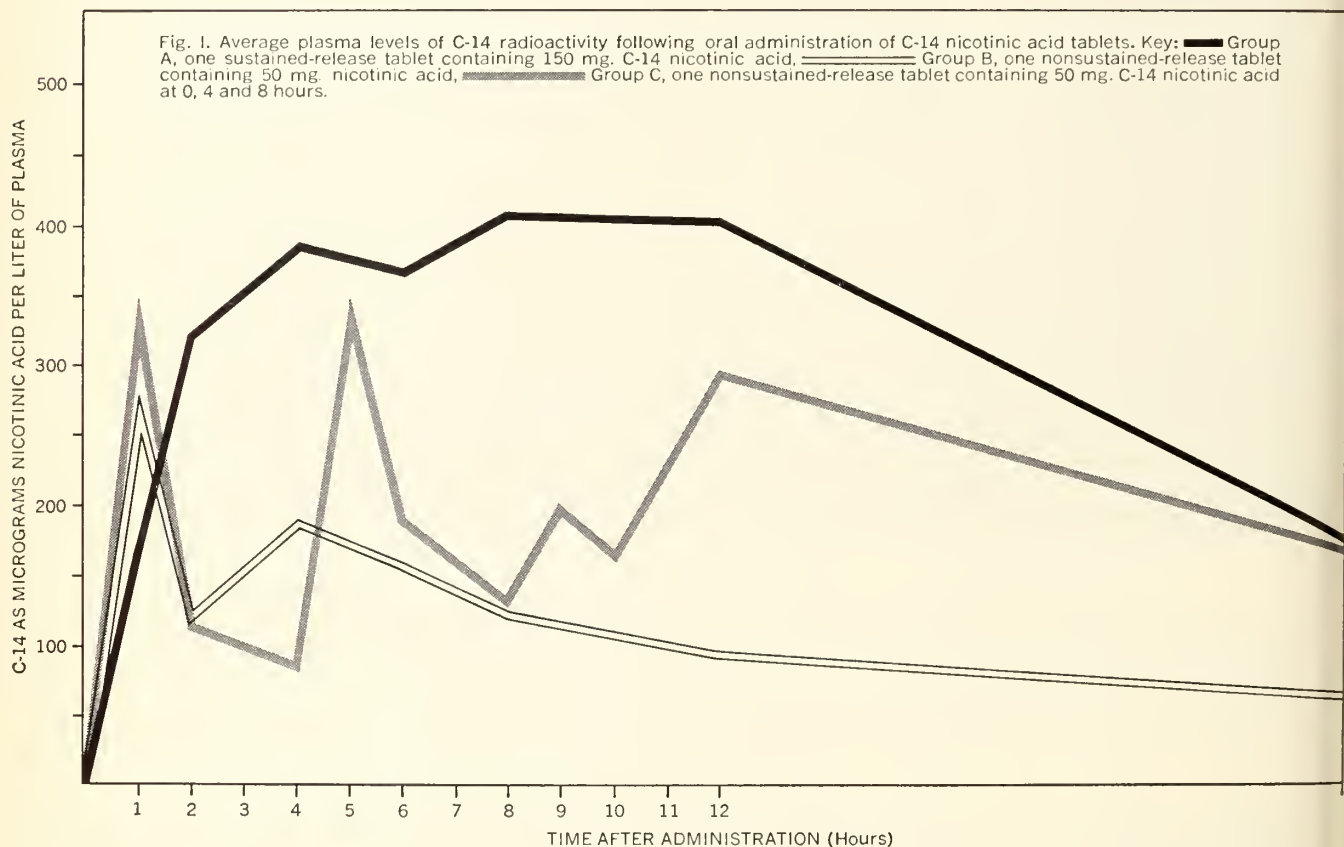
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one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. **PACKAGE INFORMATION:** Trisulfaminic Tablets: Supplied in bottles of 100 tablets. **CAUTION:** Federal law prohibits dispensing without prescription.

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(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

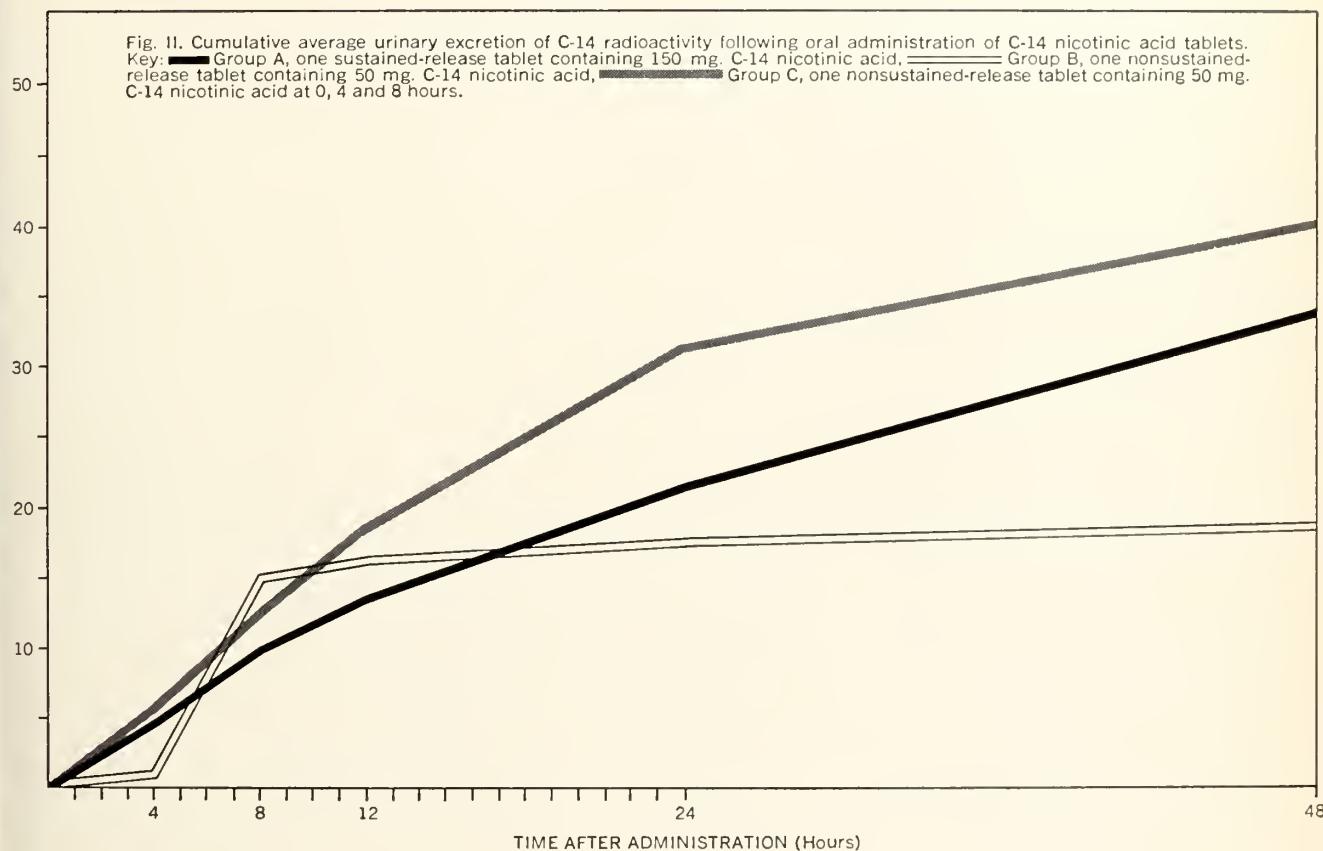
mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also, cerebrovascular circulation is complemented by pentylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert.

ged and debilitated

0.1 TO 10 MICROGRAMS NICOTINIC ACID EXCRETED



ess confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, pathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylentetrazol therapy, at an economical price. Dosage is only one tablet every 2 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.



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Geroniazol[®] TT

nicotinic acid 150 mg., pentylentetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

Medic Alert Saves Lives



Ten years ago, a California physician whose daughter almost died as a result of a tetanus antitoxin-triggered anaphylactic shock, founded the Medic Alert Foundation International. Today, more than 160,000 people wear the nonprofit Foundation's increasingly familiar stainless steel emblems on the wrist or around the neck, each calling immediate attention to one or more of 200 hidden medical problems. When necessary, a collect telephone call to the Foundation's Turlock, California headquarters, physicians and other authorized personnel may obtain additional medical information that may save the life of a conscious or unconscious person wearing a Medic Alert emblem. The telephone number 209-634-4917 appears on all emblems.

Each emblem carries the words "Medic Alert" and the staff of Aesculapius emblazoned in red enamel. The reverse side of the emblem contains one or more key words, the Foundation's telephone number and the wearer's identifying number corresponding to an information card in the Medic Alert files. Thus in an emergency, physicians or others at any hour of the day or night, can call the Foundation's Central Answering File and obtain further medical facts plus the wearer's name and address, his next of kin and the name of his family or personal physician.

The American Medical Association estimates that 40 million Americans—one in five—should be wearing a medical signaling device.

The one-time cost of a Medic Alert emblem and a round-the-clock information service is \$5.00 (sterling silver emblems are \$7.50).

However, the Foundation provides memberships without cost for persons whose physicians state they are unable to pay.

The Foundation has a dual purpose: (1) to educate people who need to obtain and wear an emblem, and (2) to teach physicians and qualified first aid personnel to look for the emblem. At present 30 national and overseas airlines instruct their hostesses to look for Medic Alert emblems, and many industries provide information about Medic Alert in their industrial health programs.

Some emblem wearers are laryngectomees, others have a collapsed lung or Meniere's disease or some other problem. The youngest emblem wearer is one year old, the oldest is 92.

The Medic Alert Foundation International has affiliate organizations in Canada, the United Kingdom and the Republic of Ireland, the Netherlands, Belgium, Spain, South Africa, New Zealand, the Philippines, and is registered in 24 other countries. It is officially endorsed by the American Academy of General Practice, the Student American Medical Association, the American Association of Nursing Homes, the American Legion, the International Association of Chiefs of Police, the National Sheriffs' Association, National Association of Life Underwriters, the Association of Life Insurance Medical Directors and many state and county medical societies. It also has the endorsement of the President's Committee on Employment of the Handicapped.

Policies in this nonprofit foundation are established by a Board of Directors assisted by a Medical Advisory Committee. Further information of interest to physicians and their patients and application forms may be obtained by writing to Chester L. Watts, Executive Director of the Medic Alert Foundation, Turlock, California 95380.

MOLECULAR REMODELING—

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodeling to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.¹ Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,² the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.³

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.⁴ However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.⁵

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors with the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.⁶ The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.⁷ And, like its predecessor, acetazolamide precipitated metabolic acidosis. Its prolonged use could result in hypokalemic acidosis.⁷

The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide

group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.⁸ Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.^{9,10}

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.¹¹ It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.¹¹ The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.¹¹ Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.⁷

Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.¹²

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with

doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."¹³

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

Contraindications: Severe renal impairment; previous hypersensitivity.

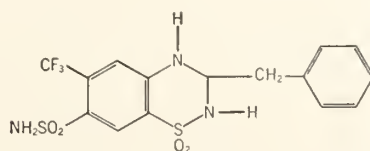
Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin \bar{c} K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

References: 1. Southworth, H.: *Proc. Soc. Exper. Biol. & Med.* 36:58, 1937. 2. Mann, T. and Keilin, D.: *Nature* 146:164, 1940. 3. Pitts, R. F., and Alexander, R. S.: *Am. J. Physiol.* 144:239, 1945. 4. Schwarz, W. B.: *New England J. Med.* 240:173, 1949. 5. Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: *Edema Mechanisms and Management*, Philadelphia, W. B. Saunders Co., 1960, p. 259. 6. Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 254. 7. Werko, L., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 188. 8. Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 274. 9. Maren, T. H., and Wiley, C. E.: *J. Pharmacol. & Exper. Therap.* 143:230, 1964. 10. Earley, L. E., and Orloff, J.: *Ann. Rev. Med.* 15:149, 1964. 11. Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 276. 12. Ford, R. V., in Moyer, J. H., and Fuchs, M.: *op. cit.*, p. 290. 13. cited in Fuchs, M., and Mallin, S. R. (ref. 11): *op. cit.*, p. 283.



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SQUIBB BENDROFLUMETHIAZIDE
to reduce excess fluid
or high blood pressure

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"The Priceless Ingredient" of every product
is the honor and integrity of its maker

Clinical Lectures to be Held at Colleges and Universities

The Medical Association of the State of Alabama, in co-operation with the A. M. A., is co-sponsoring clinical lectures in 6 colleges and universities during the 1966-67 academic year. The A. M. A. Council on Foods and Nutrition initiated the clinical nutrition lecture program in the fall of 1964. The program is being carried out on a regional basis with several lecturers participating.

The lectures are designed to stimulate undergraduate students to consider careers in the health sciences, as well as to inform the audience of recent developments in the field of nutrition.

A total of 36 lectures this year have been scheduled in the eight-state area which includes Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, South Carolina and Texas. Six of the lectures are scheduled in Alabama.

Dr. C. E. Butterworth, Jr., Associate Professor of Medicine, Director, Nutrition Division, University of Alabama Medical Center will give the following lectures during the months of October, November and February:

Alabama College in Montevallo
Tuesday, October 4

Tuskegee Institute in Tuskegee
Tuesday, October 11 at 7:00 p. m.

Troy State College in Troy
Wednesday, October 12 at 9:30 a. m.

Jacksonville State College in Jacksonville
Wednesday, November 2

Auburn University in Auburn
Monday, November 7 at 7:00 p. m.

Florence State College in Florence
Tuesday, February 28 at 10:00 a. m.

Dr. Charles Butterworth projects an active interest in the study of human nutrition. He

is a graduate of the University of Virginia in Charlottesville. From 1955-57, Dr. Butterworth was Chief of the Sprue Research Team, U. S. Army Tropical Research Medical Laboratory, San Juan, Puerto Rico. Since 1958, he has been on the faculty in the Department of Medicine at the Medical College of Alabama. He is currently Associate Professor of Medicine and Chief, Nutrition Division.

Dr. Butterworth is a member of many societies including the American Federation for Clinical Research, Sigma Xi, Southern Society for Clinical Investigation, American Society of Hematology, Society for Experimental Biology and Medicine, American Institute of Nutrition and the American Society of Clinical Nutrition.

Dr. Butterworth's research interests are in the area of folic acid and vitamin B₁₂ metabolism; iron metabolism and iron storage diseases; intestinal absorption; and nucleotide metabolism. He has written 32 scientific papers on these subjects.

How To Impede Research

During an earlier age of drug development in the U. S., the evaluation of compounds depended largely on trial-and-error methods in the hands of the general practitioners. The increasing complexity of drugs, as well as the growing sophistication of science in general, stimulated a trend toward more systematized evaluation of techniques. The danger, however, is that the pendulum may swing too far in this direction under the stimulus of public demand for perfect drugs and the government's increasing involvement in the evaluation process. This could impede the very research that produces golden ages in discovery.—Morris Fishbein, MD, in *Medical World News*, (7:184) March 18, 1966.



"All Interns are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards; they all are underpaid, too. Therefore, all interns are alike.

That's utter nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine* specific differences in-

volving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all interns aren't alike, either.



Postgraduate Courses Feature of AMA Clinical Convention

LAS VEGAS—A scientific program especially designed for the physician in practice is scheduled for the 20th Clinical Convention of the American Medical Association.

The four-day meeting here Nov. 27-30 will include scientific sessions on 18 major topics, three postgraduate courses, breakfast roundtable conferences, closed-circuit television and medical motion picture programs, and a variety of scientific exhibits.

Of special interest are the postgraduate courses, which have been expanded to three topics: Obstetrics and Gynecology, Fluid and Electrolyte Balance, and Cardiovascular Disease. Each course will consist of three half-day sessions, each of which will feature several outstanding teachers. There will be a \$10 registration fee for each course.

Lively discussion should be a feature of four Breakfast Roundtable Conferences. The topics: "An Agonizing Reappraisal of Cancer Chemotherapy," "The Problem and Potential of LSD," "The Management of Metabolic Bone Disease," and "Indication for Cardioversion."

An outstanding program of closed-circuit color television and more than 25 medical motion pictures will be presented.

Topics at the scientific sessions include:

scintillation scanning, radiation and cancer, clinical pulmonary physiology, gastroenterology, futuristic diagnostic and therapeutic tools, neck pain, antibiotics, urology, aerospace medicine, unconsciousness, dermatology, juvenile diabetes, endocrine and metabolic diseases, pediatrics, surgery, hematology, psychiatry, and otolaryngology.

Scientific and industrial exhibits and all scientific meetings will be in the newly expanded Las Vegas Convention Center.

The AMA House of Delegates will meet in the Dunes Hotel and Caesar's Palace.

The Eighth National Conference on the Medical Aspects of Sports will be held in conjunction with the Clinical Convention. A day-long program of discussion of problems faced by team physicians at all levels of athletic competition will be discussed. The meeting will be Sunday, November 27, at Caesar's Palace.


For advance registration at the Clinical Convention, write to the Circulation and Records Department, American Medical Association, 535 N. Dearborn St., Chicago, Ill., 60610.

For information on hotel reservations, write to the AMA Housing Bureau, Las Vegas Convention Bureau, Convention Center, Paradise Road, Las Vegas, Nevada.



Drug Safety—Who's Responsible?

Government, the physician, and the pharmaceutical industry must join forces to reduce injury from adverse drug reactions. It is industry's responsibility to continue with the development of safer and more effective drugs. It is the responsibility of the physician to use drugs with discretion and to abstain from using potent and hazardous drugs for trivial conditions. It is the government's responsibility, with its virtually unlimited funds and resources, to continuously review and survey adverse experience gained with drugs from all sources and to bring these facts before physicians preferably through already organized channels of medical communication. The government further has a responsibility to remove overly hazardous drugs from the market when usefulness does not balance off against hazard, but it must not use this authority in an arbitrary and capricious manner. The evaluation of drugs for safety is a most difficult and complex matter, and no simple formula can be devised to arrive at a conclusive opinion.—Joseph F. Sadusk, Jr., M. D., to American College of Physicians, New York, April 19, 1966.



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DEMETHYLCHLORTETRACYCLINE

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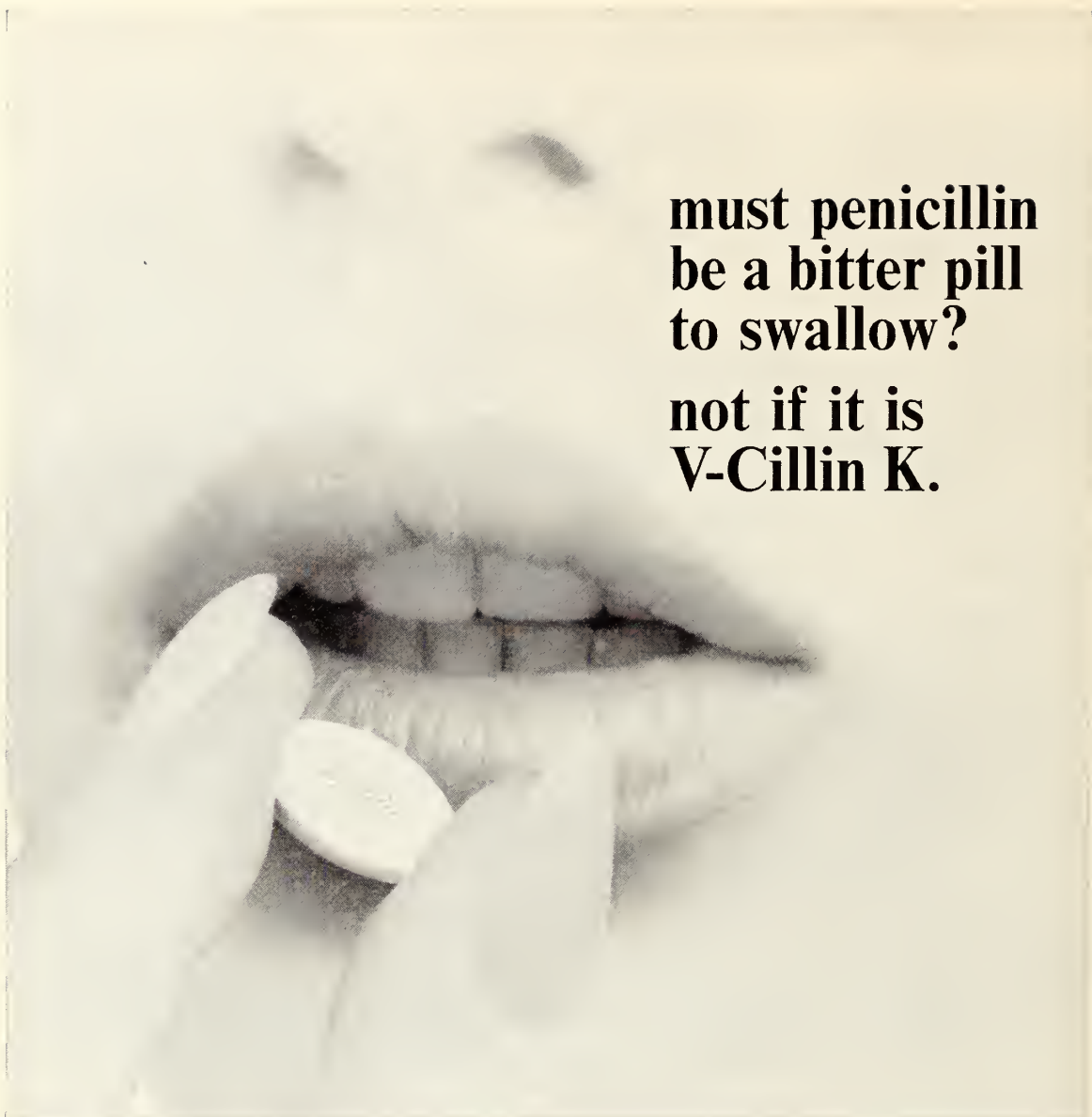
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e farm.



**must penicillin
be a bitter pill
to swallow?**

**not if it is
V-Cillin K.**

V-Cillin K now has a unique glossy coating that banishes bitter penicillin taste and makes it easier to swallow. Within six seconds (just long enough for the tablet to get past the taste buds), the coating dissolves and the penicillin is ready for immediate absorption into the bloodstream. The patient still gets all the special benefits of V-Cillin K, including consistent dependability . . . even in the presence of food.

Indications: V-Cillin K is an antibiotic useful in the treatment of streptococcus, pneumococcus, and gonococcus infections and infections caused by sensitive strains of staphylococci.

Contraindications and Precautions: Although sensitivity reactions are much less common after oral than after parenteral administration, V-Cillin K should not be administered to patients with a history of allergy

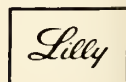
to penicillin. As with any antibiotic, observation for overgrowth of nonsusceptible organisms during treatment is important.

Usual Dosage Range: 125 mg. (200,000 units) three times a day to 250 mg. every four hours.

Supplied: Tablets V-Cillin K, 125 or 250 mg., and V-Cillin K, Pediatric, 125 mg. per 5-cc. teaspoonful, in 40, 80, and 150-cc.-size packages.

V-Cillin K[®] Six-Second
Barrier to
Bitterness
**Potassium Phenoxymethyl
Penicillin**

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.



THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

October, 1966

No. 4

Neonatal Mortality*

Herschel P. Bentley, Jr.

Professor and Chairman

Department of Pediatrics

University of Alabama Medical Center

This paper is concerned with the problem of neonatal mortality, which the physicians in the State of Alabama should have a marked interest. Alabama has the second highest neonatal mortality rate in the entire nation. This discussion is concerned with what appears to be the primary problems associated with neonatal mortality and definite, proposed, progressive steps the physicians in the State might take to alter these appalling statistics.

Table One shows the charge to the Committee on Maternal and Child Care of the American Medical Association's Council on Medical Service.¹ There are four points, but the fourth point needs stressing particularly since this places it upon the members of State and County Medical Societies to vigorously approach this problem and develop workable solutions.

Initially, the terminology regarding maternal and infant deaths needs clarifying. The

*Presented at the 105th Annual Session of the Medical Association of the State of Alabama, April 21, 1966.

TABLE I

The Charge to the Committee on Maternal and Child Care of the American Medical Association

1. Keep informed on programs, studies, and research designed to improve maternal and child care.
 2. Compile and disseminate information on maternal and child care so that others may utilize it to the best possible advantage.
 3. Endeavor to coordinate the effects of and to effect liaison with other groups working on similar problems.
 4. *Serve as a center for the compilation of studies and programs by the committee and carried on by similarly titled committees of the state and county medical societies.*
- Emphasis by italics is the author's.

term, perinatal deaths, must be utilized rather than obstetrical and separate neonatal deaths. It is impossible to separate a neonatal death from what happened to the infant during its in-utero gestational period. Certainly, maternal deaths would not occur if it were not for the pregnancy. The term, perinatal deaths, encompasses both and keeps the pregnancy and all of its complications in proper perspective.

TABLE 2

Cause of Ninety Per Cent of Infant Deaths

1. Prematurity
2. Congenital malformations
3. Anoxia
4. Birth trauma

Table Two documents the four primary causes of infant deaths; prematurity, congenital malformations, anoxia, and birth trauma. Of these, prematurity is the most serious since premature infants have a perinatal death rate 28 times higher than the full term infant.¹ It has been well documented that in addition they have a higher incidence of neurological abnormalities and other major illnesses.

First, one must redefine the term, prematurity. For years, prematurity was defined as a child who weighed less than 2500 grams at birth. We now realize that this definition is wrong. One still uses a birth weight below 2500 grams as defining a low birth weight baby. However, the vital question arises as to whether the child is truly premature or simply low birth weight. This can be solved by utilizing the intrauterine growth charts developed by Lubchenco, et al.² From these charts, one can determine whether one has an immature baby, or an intrauterine growth retarded baby. Every hospital with a maternity service should be equipped with these charts. However, it is well known that Negro newborn infants are smaller than Caucasian children, and therefore, separate intrauterine growth charts for Negroes are a necessity. Data have been collected and are nearly correlated by Dr. George Cassady of the Department of Pediatrics, University of Alabama Medical Center. These data will give the normal intrauterine growth curves specifically for the Negro population of our State. It is very difficult to apply data from growth charts from other areas of the country since much of the genetic backgrounds of those populations are different from ours. Therefore, when the data

for the population of Alabama are published, every hospital in the State of Alabama should have these posted in their nursery. By determining the intrauterine growth percentile for each low birth weight newborn, the low birth weight infants can be classified as immature growth retarded babies, truly immature babies, or mature intrauterine growth retarded babies. This is an extremely important classification because the problems that one deals with in an immature infant are entirely different from those that one deals with in an intrauterine growth retarded baby. Such a simple thing as this can completely determine the clinical approach to the problems that one meets in trying to keep these infants alive.

For example, if one realizes that a child is a truly immature infant, one can expect a high possibility of respiratory distress syndrome. Hyaline membrane disease has been recognized as a cause of respiratory distress syndrome in these children for years, but many other conditions can cause this syndrome. Therefore, it is imperative that a definitive diagnosis of the problem causing the child's respiratory distress be immediately ascertained. Without exception, every infant with respiratory distress in the newborn period should have an immediate chest X-ray. It is amazing in our nursery population how many of the babies with the respiratory distress syndrome have a condition which is immediately treatable such as a pulmonary cyst, pneumothorax, diaphragmatic hernia, etc. Also, the progressive, particulate atelectasis that occurs in hyaline membrane disease causes a feathery type of consolidation throughout all the lung fields on X-ray to help one make this diagnosis.

If hyaline membrane disease is diagnosed, the only treatment that one has is supportive. One must maintain the pH of the infant at normal levels and also maintain adequate tissue oxygenation so that the child does not become acidotic. In the larger hospitals, determination of these physiologic parameters are made by placing a catheter into an umbilical blood vessel, preferably the umbilical

artery, and drawing serial blood samples for PO_2 , PCO_2 , and pH measurements. There is no reason why any hospital that has a nursery of any size should not be equipped to measure PO_2 , PCO_2 , and pH. The blood gas and pH electrodes are commercially available and determinations can be obtained on as little as $\frac{1}{4}$ cc. of blood. No physician should rely on serum CO_2 content or combining power to try to guess whether a patient is acidotic or alkalotic, but one should have a direct measurement of blood pH. However, if blood gases are not available, one has to rely on visual determination of cyanosis which is inadequate at best.

In treating these infants, it is imperative that the oxygen be carried to levels necessary to prevent cyanosis. Retrolental fibroplasia will occur if the child gets prolonged high concentrations of oxygen in his blood stream, and therefore, concentrations of oxygen should be high enough to keep the child adequately oxygenated, but should not be higher than this. If one is able to monitor blood gases, one keeps the arterial PO_2 levels normal with the lowest possible oxygen saturation of the ambient air. Frequently, one will have to place children in 100% oxygen as this will be required to maintain normal oxygenation. It is imperative that this oxygen concentration be lowered as the infants' pulmonary pathology improves and adequate tissue oxygenation makes it possible. One can support these children over a two or three day period, which is the normal length of hyaline membrane disease. In spite of this, however, blood oxygenation frequently cannot be kept at levels to keep the child from developing marked acidosis. This requires the monitoring and maintaining of blood pH at or near normal levels with an intravenous buffer such as sodium bicarbonate or Tris. By maintaining adequate oxygenation and normal pH, one can salvage many of these infants that would otherwise be lost.

The problem of congenital malformations is a major cause of increased perinatal mortality rate and may be approached in two ways. These are the prevention and the early

diagnosis of congenital malformations.

The teratogenic effect of drugs is a well recognized fact. In experimental animals and humans, tolbutamide administered to the mothers during pregnancy has been associated with heart anomalies in the infants;³ cortisone with cleft palate and harelip;^{4, 5} synthetic estrogen agents with masculinization;⁶ and salicylates with pregnancy wastage and increased malformation.⁷ In very interesting studies concerning the use of antibiotics during pregnancy,⁸ some very thought provoking findings have been found. In one study⁸ of 387 pregnancies, 13 mothers were given antibiotics during the first three weeks. Of these 13 patients, one had an abortion, six had malformed babies, and six were normal. There was an incidence of 3 per cent malformation in the non-treated group and 46 per cent in the treated. In another study of 656 pregnancies,⁸ 17 patients were treated with antibiotics in the first 12 weeks. The pregnancy wastage was twice as high in the treated patients as the untreated patients. In patients with febrile illnesses, but with no antibiotic therapy, there was no increase in pregnancy wastage. These statistics speak for themselves and require no further elaboration, except to say that one should be extremely careful in the utilization of **any** drugs in pregnancy without definite indication and full recognition of the fact that they might cause difficulty with the infant.

In infants with congenital defects, early diagnosis is imperative so that definitive, corrective procedures might be undertaken. There is a definite need for some way of screening these infants to detect hidden congenital defects that would cause rather serious disease in a short period of time. Such problems require imaginative steps and something other than a routine CBC and urinalysis be done on these children. Three positive suggestions are offered of which two have been proven, and one is being evaluated at the present time. First, all newborn infants should have a screening for reducing substances in the urine in the newborn nursery. This could proceed to urine chroma-

tography for identification if any sugars were present at this age. Galactosemia can be detected by checking each urine with a glucose oxidase impregnated strip and a Benedict's reducing substance tablet. Galactosuria is suspected if there is a reducing substance present, but not true glucose.

Second, screening must be carried out for the amino acidurias. Screening of the urine for phenylketonuria (PKU) in the newborn period is essentially worthless, as these children rarely excrete phenylalanine at that time. Therefore, the Guthrie test for detecting elevated phenylalanine blood levels in the blood is widely used at the present time. However, with this single determination, one is focusing on one inborn error of metabolism, which actually causes a relatively small amount of disease, and totally ignoring other amino acidurias which probably cause more trouble than PKU. There is now an excellent process available for the screening of the blood of all infants for any elevated amino acids in the blood stream. Using Dr. Mary Efron's technique,⁹ one can stick the infant's heel, place a blood streak on a piece of filter paper, and mail it to a central laboratory where amino acid chromatography can be carried out. Any abnormal amino acid elevations can be quickly identified and a definite diagnosis of any of the amino acidurias be established. This should definitely be placed in as part of the routine screening of all infants in any nursery anywhere in the State.

Another method of screening is one presently being employed on an investigational basis in the Department of Pediatrics and the Department of Clinical Pathology at the University of Alabama Medical Center. This involves screening of the sera of cord blood for the presence of abnormal proteins. The newborn should be born with no gamma M protein. Dr. Charles A. Alford has achieved very good results in showing hidden congenital diseases by detecting elevated gamma M proteins in the cord sera of newborn infants. This appears to have great promise as a means of detecting defects early

in life long before they develop complications to the point that clinical signs become evident.

To be effective, active programs have to be carried out in the individual hospitals to lower perinatal mortality. It is obvious that the first thing to do is identify each hospital's problems. This requires the establishment of a perinatal mortality committee which has been recommended by the American Medical Association for several years. Table Three depicts a suggestion as to the composition of a perinatal mortality committee. It should consist of a pediatrician, obstetrician, pathologist, and anesthesiologist with a hospital administrator and the head nurse sitting as ex-officio members. In smaller hospitals, the nearest possible constituents should be substituted. It is imperative that this committee have the same prerogatives, and be as important a functioning committee, as a tissue committee.

TABLE 3
Perinatal Mortality Committee
Suggested Composition

Pediatrician
Obstetrician
Pathologist
Anesthesiologist
Ex Officio: Hospital Administrator
Ex Officio: Head Nurse

or:

In smaller hospitals, the nearest
comparable constituents.

Table Four demonstrates the duties of a perinatal mortality committee. These functions are extremely important and must be performed meticulously. Each perinatal death must be classified as preventable or non-preventable. If it were preventable, then decisions must be made regarding the underlying cause of the death. These causes include pediatric error where an obvious error in the management of the child caused death; an obstetrical error where management of prenatal situations caused the perinatal death; community error where inadequate

care and treatment was available to the mother and that caused a perinatal death; anesthetic error where some abnormality in anesthesia caused anoxia, etc. and a perinatal death. These, of course, do not have to go on the chart, but can be coded in a certain way so that only the committee can break the code and therefore, the judgment not be splashed across the hospital record. However, it is imperative that these reports be recorded and especially called to the atten-

tion of an offending physician. Steps then must be taken to remedy the situation whatever the cause of increased mortality rate might be. In doing this, one would immediately be struck with the fantastic amount of improvement that would be accomplished in any hospital in salvaging more of our infants and lift us from the lower echelons of the United States.

TABLE 4
Function of Perinatal Mortality Committee

1. Classify whether death preventable or non-preventable.
2. Classify preventable death as due to:
 - a. Obstetrical error
 - b. Pediatric error
 - c. Community error
 - d. Anesthetic error
3. Calculating local infant, fetal, neonatal, perinatal and postnatal mortality rates.
4. Make recommendations to all parties concerned to rectify causes of perinatal mortality.

Summary: Positive steps are suggested in reducing the extremely high neonatal death rate in the State of Alabama. The first is for physicians to begin to think in terms of perinatal deaths rather than separate obstetric and fetal-neonatal deaths.

The four leading causes of infant deaths were reviewed and shown to be prematurity, congenital malformations, anoxia and birth trauma.

Prematurity requires a new definition. By the use of intrauterine growth charts, one

can classify low birth weight infants (below 2500 grams) as immature infants or intrauterine growth retarded infants. This is important as the clinical problems one faces are different and the treatment thus entirely different. These differences and some aspects of therapy have been discussed.

The early detection of congenital abnormalities is important so early therapy can be instituted. In nurseries, screening should be routinely performed for reducing sugars in the urine and blood amino acids.

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Ophthalmological Services In A Changing World

Charles E. Jaeckle, M. D.

I couldn't help contrasting the hospitable reception on my arrival in Alabama today with my arrival in this state the first time in 1943. When I reported to the commanding officer the next day he asked me, "Can you operate?" His question disclosed his naive concept of the role of the ophthalmologist. His emphasis on surgery was partly good judgment—military medicine is frequently surgical—and partly a limited grasp of what ophthalmology is about—a mistaken notion that ophthalmology is a surgical branch of medicine—or as general surgeons sometimes say, "a surgical sub-specialty."

Such a narrow concept of ophthalmology is historically understandable. The Code of Hammurabi established a fee schedule for ophthalmic surgeons in Babylon 4,000 years ago. Celsus described the couching operation for cataract in Roman times. Daviel published a report on cataract extraction in 1748.

It was a century after Daviel before Helmholtz developed the ophthalmoscope. He immediately perceived what this optical achievement would mean, not only in the development of medical ophthalmology, but in all medical practice, especially in neurology and internal medicine. Increasingly ophthalmology was to be inter-related with medicine rather than surgery.

Consider another area in which the ophthalmologist is physician rather than surgeon. The ophthalmologist Porterfield had described the optometer for measuring the refraction of the eye in 1750, but this was not clinical procedure. It was not until 1843

that the German eye physician, Frommüller, invented the trial lens case. Ten years later Reute was still advising that patients who might require eyeglasses should "try a series of them at the optician's shop," but the end was in sight for this procedure as an accepted clinical solution. The very next year—1854—Isaac Hays, of Philadelphia, published his *Textbook on Diseases of the Eye*, which contained a chapter on clinical refraction. This marked the beginning of a decade of remarkable advances in this area. In rapid succession came Helmholtz's *Treatise on Physiological Optics*, and Donders' papers, "On the Use and Selection of Spectacles," "Ametropia and Its Results," and in 1862 "Astigmatism and Cylindrical Glasses." That same year Snellen published his famous optotypes for measuring the acuity of vision. Then in 1864 Donders' *Accommodation and Refraction of the Eye* established an ophthalmological standard. No longer was the patient to be sent to "try a pair of spectacles in the optical shop." The physician now had a scientific basis for making a diagnosis and prescribing lenses. That was 102 years ago.

Here in America, just the year before, Edward Dyer of Boston, who had studied in Europe, had brought to Philadelphia the teachings of these men, Helmholtz, Snellen, and Donders. The appearance of Donders' book marked the beginning of a new era. There soon was a raging controversy in American ophthalmological circles. The minutes of the medical societies reported the debate: Was the "selection of spectacles" the proper concern of the physician, or was the physician who incorporated clinical refraction in his practice engaging in an activity beneath the dignity of the medical profession and encroaching upon the domain of the optician? After all, eyeglasses were a pro-

Presented at the Annual Meeting of the Alabama Academy of Ophthalmology and Otolaryngology, Mobile, Alabama, April 20, 1966.

From the Department of Ophthalmology, Defiance Hospital, Defiance, Ohio.

duct in trade! Physicians had never become involved in this before. And were not some of the opticians becoming skillful in "testing" for eyeglasses? Some had a knowledge of optics and mathematics. Anyone could buy a trial case and a Snellen chart.

Those who argued that they were too busy with surgery and therapeutics to bother with refraction, and that refraction by a physician was "unethical," presently gave ground to those who contended that the refractive state should be determined in the course of the ophthalmological examination and the findings should be considered in the differential diagnosis of the patient's symptoms. The patient had a need: refraction *and* differential diagnosis. The mere fact that until then eyeglasses had been merchandise did not alter that need. That refraction must be an integral part of ophthalmological medical care was inescapable. If there is a familiar ring to this story, it need only be remembered that those who do not read history are doomed to repeat it.

The subject of refraction was controversial, but respectable medical bodies did not exclude it from discussion. In due time the emphasis in the debate shifted from the subject of whether the physician should refract. Refraction was established procedure. It remained for Edward Jackson and Walter Lancaster to argue for its importance.

No, ophthalmology is not a surgical subspecialty.

As in all clinical "specialties" of medicine, the practice of ophthalmology involves the special application of the general body of knowledge—in this case of both medicine and surgery—to a given system, but ophthalmology also has a characteristic found in few other clinical branches of medicine. It entails the clinical application of a special body of basic knowledge—optics. Medicine, surgery, optics—ophthalmology has a triple base.

There are other ways in which ophthalmology is distinguished from most specialties. The ophthalmologist's patients are of all ages—he renders cradle-to-grave medical care.

The need for ophthalmological service is almost universal. It is usually self-evident—most patients come directly to the ophthalmologist without prior medical examination and referral. It is continuing. Although the ophthalmologist is called upon in consultation by physicians in virtually all branches, to most of his patients he is not consulting physician, but attending physician. The ophthalmologist, like the generalist, is a family practitioner.

But is this the image the public has of ophthalmology? Is this the way your legislators see you? Do even your colleagues in medicine have this picture of the ophthalmologist? Ophthalmology is often a subdivision under the department of surgery in the medical school. If we permit a surgical image of ophthalmology to be created, can we expect the people, when they have eye symptoms that to them are obviously not of a surgical nature, to realize that they need an ophthalmologist? When the table of medical organization is visible to the press and the public—in the hospital, in the medical society—the layman often sees the ophthalmologist as an "eye surgeon" among the subspecialists in surgery. Is it surprising that he is unaware that your major activity is diagnosis and not surgery? Does the patient who thinks he needs eyeglasses—and who does *not* "want" surgery—does *he* understand that this surgeon is the man he needs? The ophthalmologist is more than a surgeon.

The image of the ophthalmologist as a surgeon has been exploited by optometry and used adroitly in public relations and before the legislators. In 1938 the American Optometric Association adopted a resolution which began:

"Whereas the physiological eyecare known as optometry and the surgical eyecare known as ophthalmology are two separate and distinct professions . . ."

Many optometric public relation leaflets stress a surgical identity of the ophthalmologist. In testimony before congressional committees the image of the optometrist is presented as the refractionist-medical diag-

nostician. It has been asserted or implied that except for treatment, represented as essentially surgical, the work of the optometrist and that of the ophthalmologist are identical*—but of course the ophthalmologist is a surgeon.

We are all aware of the rising demand for medical care resulting from:

- the population explosion
- the rising standard of living—more people have more resources to pay for medical services
- the rising educational level—people demand a higher level of care
- the knowledge and technology explosions—we have more services to give.

Other factors influencing the demand for medical care are peculiar to eye care:

1. The *disproportionate* population increase—

(a) in the younger age group (more strabismus, amblyopia, and congenital defects) and

(b) in the older age group (more cataracts, degenerative disease, and glaucoma)

2. A higher percentage of the people with eye complaints electing medical ser-

vices, rather than simple optical services*

3. Technological changes in industry—skilled workers need refractive correction
4. Industry's provision of prescription safety glasses
5. Fringe benefits—the development of funded payment plans to cover office ophthalmological examination, supplementing medical treatment visits and surgical care covered by general insurance plans.

This is the demand ophthalmology must meet. The physician does not need more patients. To meet the patient's need for services ophthalmology will have to make adjustments. It will take more manpower. In the face of an overwhelming demand the solution is not to develop a corps of feldschers, not to delegate to lesser trained groups parts of the practice of medicine, but to meet the medical need—to accept medicine's responsibility for providing total eye care. We will have to use more helpers, but we must use them to help not to replace the physician.

When the ophthalmologist finishes his residency he understands his *function* to provide medical care for the patient who comes to him. He has not always defined the *mission* of the profession.

The mission of ophthalmology is to see that all people with disorders of the visual system get the required medical care.

If physicians do not take up the mission of Medicine, others will. The unqualified will build upon the public's innocence and add confusion to their ignorance. Sociologists, observing the people's apathy concerning their health, will seek to meet the need with

*A senator, trying to distinguish between an ophthalmologist and an optometrist, addressed an optometric witness: "But the doctor . . . he takes me back to see . . . whether I have diabetic extrusions, if I have glaucoma. That is the principal difference." The reply: "No, sir, it is not, because the optometrist today would run through the *same* series of tests to make a determination of the same type, glaucoma testing as well as interior eye investigation or whether or not the retina would indicate diabetic extrusions or any other retinal problem." And again: "to determine whether or not this eye . . . is a healthy eye"; "upon determination that this is an unhealthy eye he will then proceed to utilize the various procedures which he has," "but . . . the treatment, the surgery . . . is the province of the physician."² (Author's italics)

*"Practically everything sold was 'glazed goods' [ready-made spectacles]" (Circa 1870).³ Fifty years later about 80 per cent of eyeglasses were procured without examination or diagnosis by a physician. In 1955 about 50 per cent of eyeglasses distributed in the U. S. were prescribed by a physician.⁴

cumbersome government plans and expensive poverty programs. Unions, without medical guidance, will write prepayment plans with built-in provisions for a *double* standard of eye care. And the physician, faithful to his medical customs and manners—which sometimes tend to be confused with ethics—will soon find he is no longer in charge of the medical care of the nation, no longer in command of the medical team. He will be the hired man, a competent surgical technician and harassed civil servant, taking orders from those who have taken up the mission of medicine.

It is of interest to note that until ten years ago a specialty so highly organized as ophthalmology had no society which could direct its attention to sociomedical matters. When the American Association of Ophthalmology was established in 1956 as the National Medical Foundation for Eye Care it was conceived with the purpose of considering all aspects of eye care, expressly including the sociomedical, and of promoting a more effective utilization of our scientific knowledge of ophthalmology. This was the basis for its attention to the subject of supporting medical workers for the past nine years. These purposes were also the basis for the society's concern with such proposals as Medicare.

Medicare was intended to provide *medical* services. Those who offer the public alternatives to medical services saw in the proposed legislation a threat to their economic welfare. Amendments were sought in committee to provide for payment for their services. The chiropractic and podiatry amendments would have permitted payment under Medicare for services they were authorized by state law to render. Optometry's amendment was very different. It would have applied not only to Title XVIII (Medicare), but to all present programs under the Social Security Law and to all programs that might be provided by future amendments of that law. It would not merely have put the optometrist into Medicare—it would have equated him with the physician and put him well on his way into Medicine. The section read:

"Notwithstanding any other provision of the Social Security Act whenever payment is authorized for services which an optometrist is licensed to perform, the beneficiary shall have the freedom to obtain the services of either a physician skilled in diseases of the eye or an optometrist, whichever he may select."

That this is not the law today, the American people and the medical profession can thank the Congress and a small group of dedicated physicians who conveyed to the Conference Committee the serious implications of such a provision.

The American Association of Ophthalmology and its affiliated state societies discharged their responsibility in this matter in a coordinated action with state medical societies. Informed citizens—for example, a prominent statesman who has glaucoma—lent their support.

When the time came to draft the Medicare regulations, the special problems of eye patients had to be considered by the Social Security Administration. Again the AAO sent physicians to give guidance.

The Medicare program will provide for the services of physicians. It also provides for payment for prostheses, including ocular prostheses. The Medicare law expressly provides, however, that expenses for "routine physical checkups, eyeglasses or eye examinations for . . . prescribing, fitting, or changing eyeglasses" shall not be paid for. Ophthalmology was asked, "How does the profession suggest that the cataract patient's need for aphakic correction be provided for?" "And how shall prostheses be provided?" The Association suggested solutions within the framework of the law.

It will be important that an ophthalmologist leave no opportunity for someone to misinterpret the nature of the service he has rendered when he examines and treats a Medicare patient. The regulations have not yet been published, but examination for diagnosis and treatment will be a covered service.

Under Title XIX of the Social Security Law there is provision not only for payment for

medical services, but also for eyeglasses "prescribed by a physician skilled in diseases of the eye or by an optometrist, whichever the individual may select." Why this phrase and not just "by a physician or by an optometrist"? Or as the law formerly read, "prescribed eyeglasses"? All physicians are skilled in diseases of the eye, but this presumes otherwise. Ophthalmologists opposed the phrase—the non-ophthalmologist physician renders a proper service to his patient when he prescribes eyeglasses. The phrase was supported by optometry. Could it be that the phrase "skilled in diseases of the eye" was inserted solely to associate those words with the word "optometrist" and with the words "whichever . . . select," with the connotation of a choice between two *equals*? Medicine recognizes that the optometrist can make a useful contribution to the present need for refraction services. But the public's well-being requires that there be no representation of the optometrist's services as an equal alternative for the services of a physician. The public has a right to know the difference. Is Optometry to remain simply an alternative to medical care, or might it be possible to coordinate optometric services with medical services? For Medicine the answer must come from Ophthalmology's practitioners.

You in Alabama are to be congratulated on your defeat of a bill that would have made optometry a "learned profession" by legislative fiat, of a bill that would have given the Board of Optometrists jurisdiction over the fitting of contact lenses by a physician, and of a so-called "non-discrimination" bill that would have equated optometry with medicine. In another state when the legislature enacted just such a bill, a legislator who recognized it to be bad legislation criticized the medical profession for failure to provide adequate guidance.

Optometry has already served notice it will seek to have the state of Alabama establish an optometric school. Now it is one thing to permit limited practitioners to serve those who at their own expense choose to consult

them. It is quite another thing to spend the taxpayer's money to train limited primary practitioners—as it is to offer these services at the taxpayer's expense as a suitable substitute for medical services—to offer two grades of health care.

H. R. 12373 is a bill to establish a National Eye Institute. It will be in Senator Lister Hill's committee in the Senate. Your good senator, who made such a valuable contribution to the country by his sponsorship of the Hill-Burton rural hospital program, has indicated that his committee is less well-informed in the area of eye services. The medical profession must meet this challenge. The public need must be clearly and effectively presented. To define the issues clearly the medical profession must be represented substantially by ophthalmologists; to present the case effectively the spokesman must speak for the organized profession as a whole.

As physicians you are concerned with other legislation at the national level. For example, S. B. 2568 was introduced by Senator Philip A. Hart of Michigan. He had gathered information on physician-ownership of drug stores and physician participation in drug repackaging companies. The AMA Judicial Council and House of Delegates have declared participation in drug repackaging schemes to be in violation of the Principles of Medical Ethics, but have held the ownership of drug stores to be acceptable. Senator Hart turned his attention to the practice of many physicians of supplying spectacles to their own patients, and the practice of the majority of ophthalmologists who use contact lenses of fitting them and of course therefore supplying them to the patient.

At the Hart hearings on supply of eyeglasses optician witnesses testified that ophthalmologists who referred patients to them for glasses accepted rebates, a practice prohibited by the Principles of Medical Ethics. They also complained that their economic welfare had been adversely affected when physicians supplied their patients' needs. Senator Hart put this complaint and the accusations of unethical conduct in one package

and delivered them to the press as grounds for taking action against those doctors who supply eyeglasses to their patients.

Senator Hart's position is that the physician should not supply what he prescribes. There is certainly no denying that the physician's immediate economic interest is *always* in conflict with the patient's economic interest. He commonly advises services he supplies. Is the physician to be suspect whenever he proposes a treatment visit, an operation, an X-ray, refractive correction, blood count, or tonography, or any other service in his office? A characteristic of our American system of medical care is that the physician, as well as the patient, benefits when services are rendered. Senator Hart's solution is to prohibit the physician "... to ... receive directly or indirectly from any person any profit ... resulting from the ... furnishing or supplying by such licensee of any drug or device to such person in connection with or as a result of the rendition by such licensee of professional services to or for such person. ...". The bill does not clearly recognize the services without which eyeglasses cannot be supplied to a patient.

It is possible that in many areas the services associated with use of a necessary product are minimal and their cost could be absorbed, and so distributed with small penalty to all patients. But in other services, such as the fitting of eyeglasses, the services are initially substantial and continually recurrent. To assess the cost of such services in part against patients who do not receive them is neither practical nor moral. It would not be in the patient's interest to prohibit the physician from providing services he prescribes, or, merely because he has advised a service, from receiving compensation for ("profiting" by?) providing that service. Physicians are trained to make their decisions on the basis of the patient's interest and are committed to make their charges commensurate with the services rendered. Were

they to deviate from this they could not keep it from their colleagues and probably not from their fellow citizens. The physician's long-term interests are consonant with the patient's. It is important that the Senate understand the nature of the service that is involved here. Is it not desirable and advisable that ophthalmologists set down guidelines for this service, whether it is provided by the physician in his office, or on the physician's delegation by an optician who serves several physicians? In any branch of medicine the physicians concerned must accept the responsibility to determine and define the need for any paramedical group, its functions, its educational standards, and the manner in which its members are to be supervised.

It is of interest that when S. B. 2568 was introduced it applied to licensees in all professions and occupations except the dentist whom for some reason Senator Hart excluded. The printed bill, which appeared 24 hours after the original version was released to the press and presented on the Senate floor, differed radically, in that it applied only to physicians and to no other licensees.

Incidentally, are you acquainted with the Justice Department Consent Decree of 1951? Do you know what practices are permitted in the supply of eyeglasses? It is legal for the physician to supply eyeglasses in his office to his patients⁵, and as in any other area of medical services he may employ technical workers to assist him. It is prohibited for the physician to have any ties whatsoever, directly or indirectly, with any company or corporation or other third party which supplies to his patients either eyeglasses or any part of the fitting services for eyeglasses. If ophthalmologists support this concept—and I believe they do—is it perhaps in order publicly to affirm this position?

There is another bill in Washington that is of particular interest to you in Alabama. This is H. R. 12937, a proposed new Optometry Act for the District of Columbia, which

would redefine optometry. The present District of Columbia law, which defines optometry much as does the Alabama statute, states:

"The practice of optometry is defined to be the application of *optical* principles through *technical* methods and devices in the examination of the human eye for the purpose of *determining visual defects** and the *adaptation of lenses* for the *aid and relief* thereof." (Author's italics)

The Ohio statute is similar.

The proposed new District of Columbia definition would read:

"practice of optometry means *any one*, or any combination of the following acts . . . : the employment of *any* objective or subjective means for the *examination of the human eye*, including its *associated structures*; the *measurement* of the powers or range of human *vision*; the *determination* of the accommodative and refractive powers of the human eye; the *determination* of the scope of the *functions* of the *human eye in general*; the prescription, *adaptation*, use or *furnishing* of lenses, prisms, or frames, for the aid thereof; the prescribing, directing the use of, or *administering* vision training or *orthoptics*, and the use of any optical device in connection therewith; the *prescribing* of contact lenses for, or the *fitting* or *adaptation* of contact lenses to the human eye; and the identification of *any departure from the normal condition or function of the human eye*, including its *associated structures*;" (Author's italics)

Another provision of the bill would exclude its application to optometry students, would exclude in part its application to physicians licensed in the District of Columbia, and

would exclude in part its application to opticians supplying or replacing or duplicating eyeglasses or eyeglass frames or broken lenses, but only on the written prescription of a physician or an optometrist licensed in the District of Columbia.

Now, what does this mean? It means that the optometrist would be authorized to perform medical functions—for example, to diagnose disease or to diagnose that there is no disease, of the eye, of the ocular adnexae, and of the visual pathways of the brain. It means that broken lenses and frames could not be replaced by an optical store in Washington without a written prescription from a *District of Columbia* eye physician or a *District* optometrist. It means that no physician's technician or nurse could adjust a pair of eyeglasses ("adaptation of frames"). It means that no nurse, motor vehicle inspector, or medical student could use a Snellen chart or a perimeter.

In the state of Michigan a yet more ambitious bill would put the optometrist into medical practice even more deeply. It, too, would obstruct the physician in his provision of medical care by interfering with the carrying out by his supporting personnel of their clinical duties in the medical office and hospital outpatient department.

If these bills are enacted, how long will it be before similar bills are introduced in Alabama?

You must be on guard for legislation that would deprive the physician of his right to use the services of opticians and other physician-supporting personnel.

The greatest challenge to medicine in 1966 is getting medical care to the people. It is time for you who are engaged in this very thing to make your knowledge and experience available. All of the legislation I have described bears on this.

There is a revolution going on in America—and not just in American medicine—in all of America. We have expanded our knowledge tremendously in the realms of science and

*The term "visual defects" is clearly established to mean "refractive error" by the conjoined stated purpose of "adaptation of lenses for the aid and relief thereof."

technology, and now the problem is to enable all this that we have learned and learned how to do to benefit the people. Of what benefit is our modern knowledge of glaucoma to the person with glaucoma who does not reach the physician?

The time has come for the profession to concentrate its attention on the sociomedical issues. They are not to be dismissed with the label "controversial." They are to be discussed. Unless we have free and intelligent discussion we will never have any kind of solution to the controversial problems. And believe me, fellow ophthalmologists, if you don't come up with the solutions, there will be others who will. Their qualifications for making the decisions will be that they are sociologists or legislators, administrators or irregular practitioners, not that they are physicians who for years have been discharging a professional commitment to render medical care.

In such matters as prepayment plans, the supply of eyeglasses, civil defense, medicine's relation to non-medical personnel, the role of the optician, the training and use of technicians, you as medical practitioners must have a voice. Once a few leaders could determine the course for ophthalmology, but now policy must be developed from the solid base of the general clinical experience of all ophthalmologists. You must designate an or-

ganization to speak for you, and support it. The machinery for being heard is here. You have delegates to the AMA. You have delegates to the American Association of Ophthalmology. You have a vote in the AMA Section on Ophthalmology.

The practice of medicine is changing fast. It is taking on an entirely new shape and form. The question is: will you have a hand in the forming of it?

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5. Department of Justice letter, May 28, 1951, H. G. Morison, Assistant Attorney General (by Willis L. Hotchkiss, Chief, Midwest Office): "In our opinion, the provisions of this final judgment would not prevent any individual doctor from doing his own dispensing in his own professional offices (either himself or through a bona fide full time employee) to his own patients only. The same holds true as to doctors who operate through a partnership for purely professional purposes, or in a clinic"

Physical Activity Versus Body Fat

Among preliminary studies in which the relationship of excess food to overweight is being investigated is one which directly relates body fat and hours spent in very light activity. The relationship between per cent of body fat and hours of moderate and strenuous physical activity was not so clear cut, although men having less than 15 per cent body weight as fat performed 4.0 hours per day of moderate and strenuous activities. Men with 15 to 29.9 per cent and those with 30 per cent or more body fat spent only about half as much time in comparable activities. This study strengthens the concept that weight control requires more than merely reducing calorie intake to compensate for our sedentary habits. Instead an increase in physical activity and a low calorie balanced diet are suggested. Such a plan should be beneficial to health, possibly delaying the onset of chronic disease. (E. M. Hudson and others: "Measures of body fat and related factors in normal adults," *Journal of the American Dietetic Association*, September 1965).

Body-Builds Compared For Smokers, Non-Smokers

In a report that seems to disagree with earlier findings, no significant differences of body-build were found between smokers and non-smokers surveyed at age 18 and again 14 years later.

The investigators are Norman Livson, Ph. D., and Louis H. Stewart, Ph. D., of the Institute of Human Development, University of California, Berkeley, Calif.

An earlier Harvard University study found smokers to be generally heavier and larger on a number of bodily dimensions.

"At this stage of investigation, it would appear that the relationship between morphology (form and structure) and smoking is as yet unknown," said Drs. Livson and Stewart.

In the current study, measurements were made at about age 18 of weight, height, biacromial diameter, bi-iliac diameter and calf circumference. Fourteen years later, approximately 100 persons of each sex from this sample reported on their smoking habits. In

half the sample, these same measures had been made during childhood.

No significant statistical relationship between body-build and smoking behavior was found.

Because the findings were not in agreement with the earlier study, they indicate "some of the pitfalls of science," noted a JAMA editorial.

"Science tries to generalize from specific or limited observations. If from two sets of data two different conclusions emerge, we can be quite certain that the two sets are not 'really' similar," the editorial said.

Eventually, however, continued research will determine whether investigators are really talking about the same terms, the editorial said.

"Eventual discrimination will resolve discrepancies and will explain divergences. Thus does science progress," said the editorial.

Hill Crest Develops Psychiatric Training

Hill Crest Hospital, a private psychiatric hospital in Birmingham specializing in intensive treatment of nervous disorders, is rapidly developing a training program of interest to physicians in Alabama.

The hospital has graduated 60 psychiatric aides in the past two years, and has established an elective special training course for Senior Nursing Students from the Birmingham Baptist Hospital system. This fall Hill Crest will begin an affiliation with Jefferson State College in which nursing students will study at Hill Crest in groups of ten to fifteen for a period of three months each. The hospital facilities also meet the requirements for a third year residency in psychiatry and for internships for Psychiatric Social workers.

Of special interest to General Practitioners and Internists are staff conferences conducted at Hill Crest on Monday, Wednesday, Fri-

day and Sunday of each week. These conferences, lasting from two to two and one-half hours, are attended by all psychiatrists and heads of departments. On the last Wednesday a monthly conference is held, preceded by breakfast, at which many members of the consulting staff are also present. An outstanding speaker in an allied field is presented at the monthly conference, which begins at 8 a. m.

Hill Crest uses these staff conferences extensively in its training program, and they are regarded as excellent practical teaching seminars. They offer a unique opportunity for interested physicians in the area to hear discussions and presentations of a practical nature.

The staff of Hill Crest welcomes interested General Practitioners and Internists to attend these staff meetings.



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When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes dissatisfied about her condition.

She will breathe easier when you prescribe Novahistine LP. Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the morning and repeated in the evening will usually keep air passages clear for 24 hours.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention.

Caution patients who operate machinery or motor vehicles that drowsiness may result.

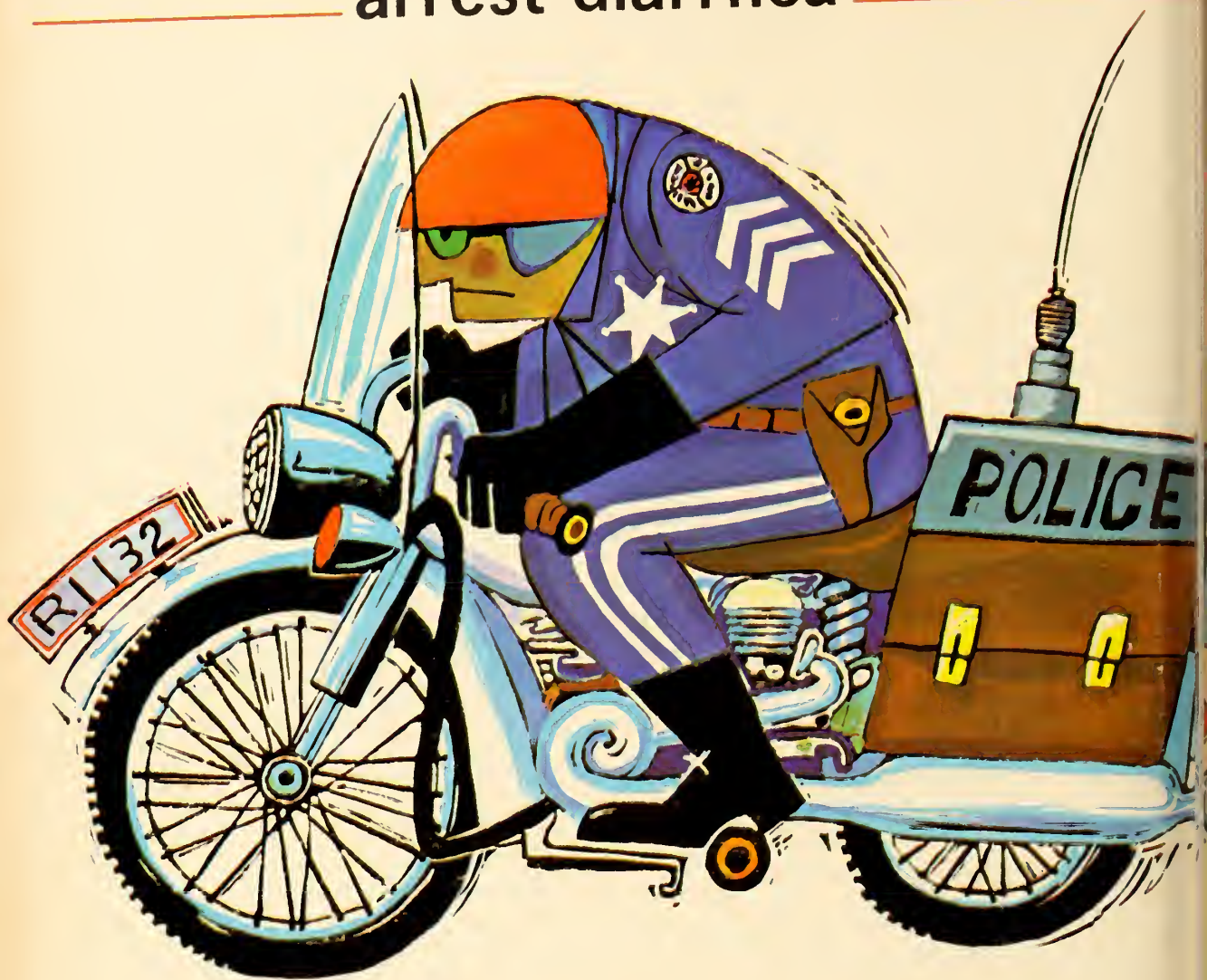
Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis 

NOVAHISTINE® LP

For relief of nasal congestion.

arrest diarrhea



LOMOTIL[®]

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride 2.5 mg.
(Warning: May be habit forming)
atropine sulfate 0.025 mg.







Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- Ulcerative colitis
- Acute infections
- Irritable bowel
- Regional enteritis
- Drug therapy
- Food Poisoning
- Functional hypermotility
- Malabsorption syndrome
- Ileostomy
- Gastroenteritis and colitis

Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months	3 mg. 	½ tsp. 3 times daily
6-12 months	4 mg. 	½ tsp. 4 times daily
1-2 years . . .	5 mg. 	½ tsp. 5 times daily
2-5 years . . .	6 mg. 	1 tsp. 3 times daily
5-8 years . . .	8 mg. 	1 tsp. 4 times daily
8-12 years	10 mg. 	1 tsp. 5 times daily

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

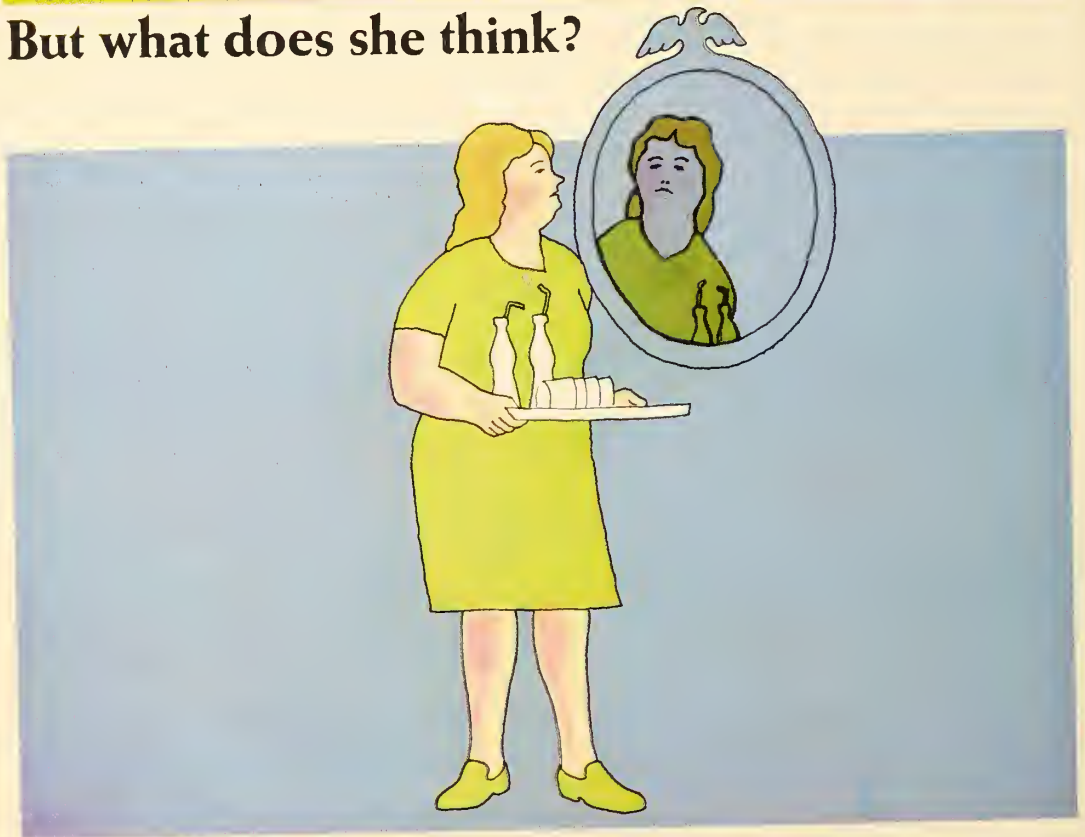
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**to help establish
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Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies. **Side Effects:** Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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Dean S. Richardson Hill of the Medical College of the University of Alabama was the featured speaker at the banquet at the Medical Assembly.



The doctors and their ladies were all smiles as they awaited the serving of dinner at the beautiful Turtle Point Yacht and Country Club.



Dr. John L. Shapiro, left, of Vanderbilt University and a featured speaker chats with Dr. John B. Rice of Florence.



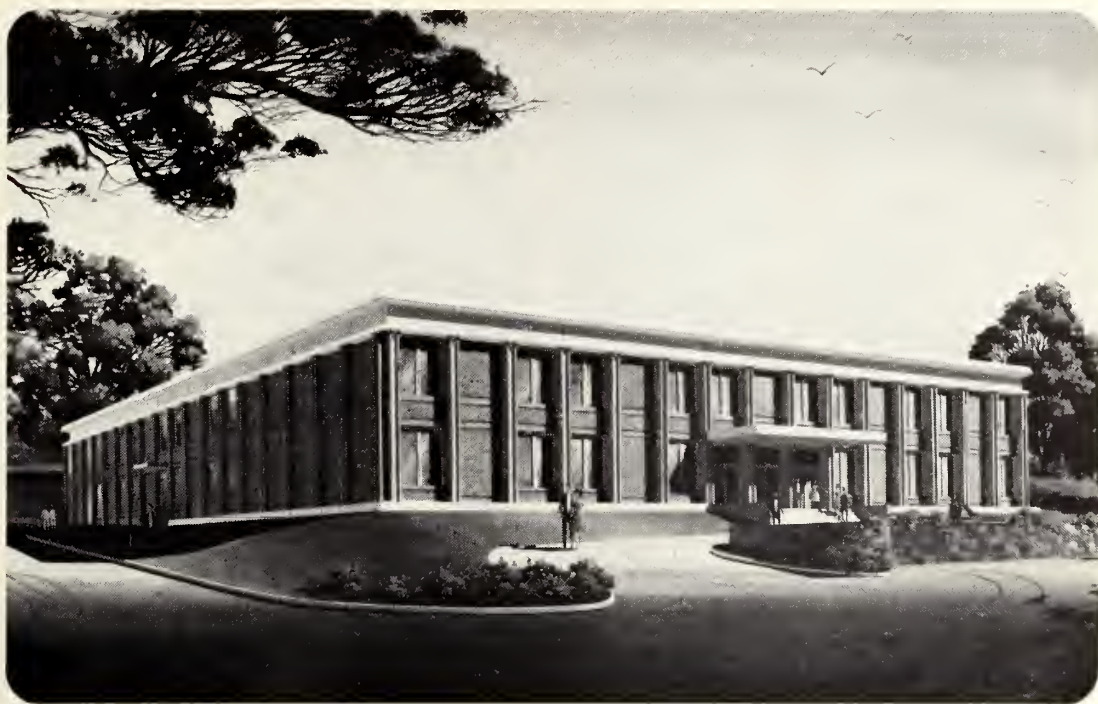
Enjoying the program at Turtle Point were, left to right, Mrs. W. W. Irwin of Moulton, Mrs. Roy W. Williams of Sheffield and Mrs. M. C. Dunn of Florence.



Dr. Robert Herman of the Cleveland Clinic, Cleveland, Ohio (right) strikes a pose with Dr. S. S. Norvell of Florence.



Dr. Robert B. Greenblatt of the Medical College of Georgia, left, swaps a story with Dr. Loren Gary, Jr., of Tusculumbia.

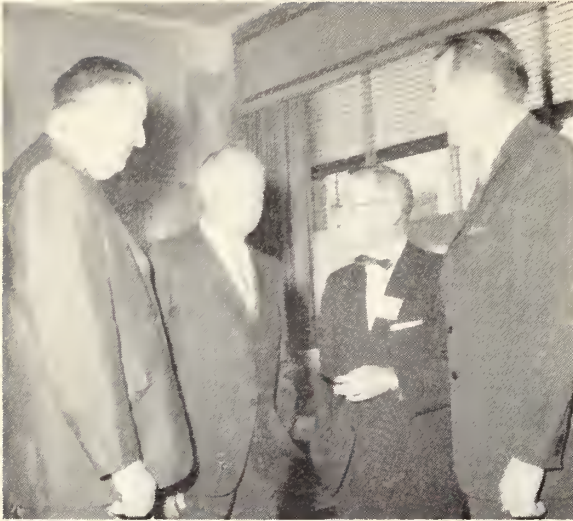


New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

PARKWOOD HOSPITAL

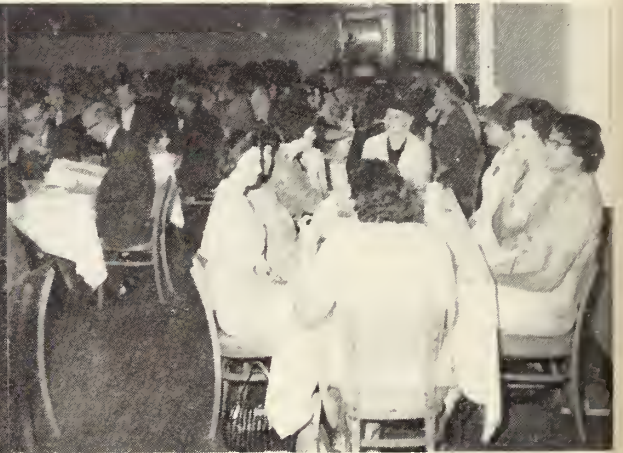
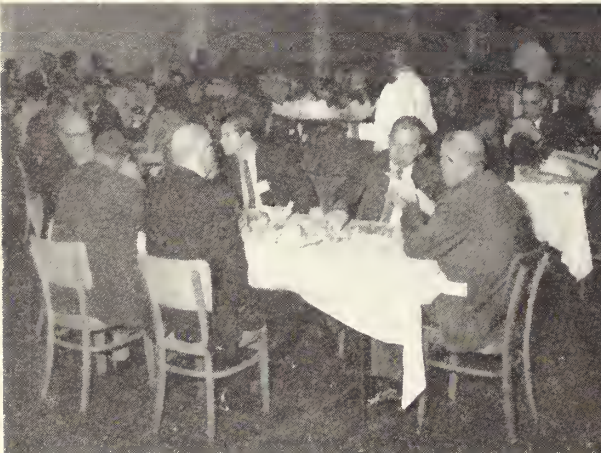
1999 Cliff Valley Way, N.E./Atlanta, Georgia 30329/Phone 634-5166 (404)



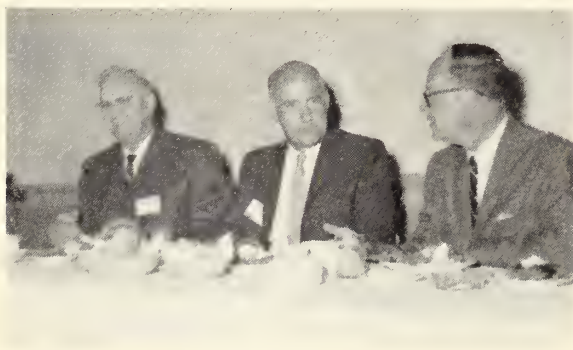
Lt. Gov. James Allen, left, chats with Drs. Edward R. Annis, J. O. Finney and Ira Myers at the first Alabama Rural Health Conference.



The Registration Desk was a busy place at the Whitley Hotel as delegates checked in for the Conference.



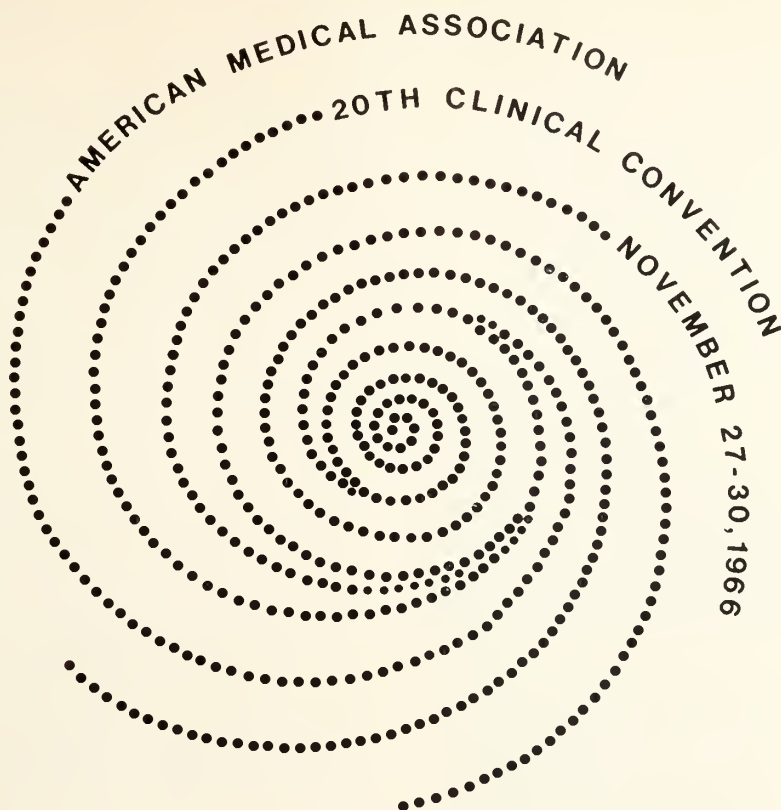
A large crowd attended the luncheon where the featured speaker was Dr. Edward R. Annis, past president of the American Medical Association.



Seated at the speakers table are, from left, Dr. Winston A. Edwards, Dr. Edward R. Annis and Dr. John S. Pilkington.



Taking a break from the activities of the program are (left to right), Dr. Harry C. Shirkey, Dr. Paul Nickerson, Mr. A. B. Reddick and Dr. Otto Burton.



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Convention site "extraordinaire" that's Las Vegas. America's entertainment capital becomes the classroom for America's practicing physicians—offering you a comprehensive, compact, postgraduate course in recent developments in medical science. A magnificent Convention Center, fine hotels and motels, excellent restaurants plus star studded entertainment await you and your family.

The AMA's first clinical convention in Las Vegas offers a top notch scientific postgraduate program.

Scientific sessions will be held on the following topics: Scintillation Scanning • Radiation and Cancer • Clinical Pulmonary Physiology • Gastroenterology • Futuristic Diagnostic and Therapeutic Tools • Neck Pain • Antibiotics • Urology • Aerospace Medicine • Unconsciousness • Dermatology • Juvenile Diabetes • Endocrine and Metabolic Diseases • Pediatrics • Surgery • Hematology • Psychiatry • Otolaryngology.

Three Postgraduate Courses will be presented: Obstetrics and Gynecology • Fluid and Electrolyte Balance • Cardiovascular Disease. Each Course will consist of three half-day sessions, and there will be a registration fee of \$10.00 for each course, payable with your advance registration.

Four Breakfast Round Table Conferences will be held on the following topics: The Management of Metabolic Bone Disease • Indication for Cardioversion • The Problems and Potential of L.S.D. • An Agonizing Reappraisal of Cancer Chemotherapy • **Closed Circuit Television** • **Medical Motion Picture Programs** • **Over 275 Scientific and Industrial Exhibits.**

The complete scientific program, plus forms for advance registration and hotel accommodations, will be featured in JAMA October 24.

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in the ulcer patient**



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INDICATIONS: Peptic ulcer. Functional digestive disturbances.

DOSAGE: In peptic ulcer 4 to 8 tablets or capsules per day. Dryness of mouth is a guide to proper dosage in acute ulcer. As the ulcer heals, increased sedation is an indicator to reduce dosage. In functional digestive disturbances, 1 tablet or capsule every six hours maintains sedation at the threshold of calmness. The mild antisecretory action does not disturb the average patient.

SIDE-EFFECTS: Dryness of mouth, blurred vision and difficult urination. PRECAUTIONS: Use cautiously in prostatic hypertrophy. Do not use in glaucoma.

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100, 500 and 1000*

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VITAL STATISTICS

The following changes have been made in the 1966 Roster of the Medical Association of the State of Alabama as of September 1, 1966. (These changes include the months of July and August, 1966.)

DEATHS

Chilton, Alfred M., Anniston, Ala., deceased August 17, 1966. (Calhoun County Medical Society.)

Craddock, French H., Jr., Sylacauga, Ala., deceased July 1966. (Talladega County Medical Society.)

Gillmore, James P., Camden, Ala., deceased. (Wilcox County Medical Society.)

Jackson, David E., Lester, Ala., deceased July 1966. (Limestone County Medical Society.)

NEW MEMBERS

Curtis, Charles Alfred, Calera, Ala., 35040. (Shelby County Medical Society.)

Smith, George Cicero, P. O. Box 98, Lineville, Ala., 36266. (Clay County Medical Society.)

CHANGES OF ADDRESS

Ager, L. Lamar, present Birmingham, Ala., to 2101 Magnolia Ave., 35205. (Jefferson County Medical Society.)

Angle, David L., present Birmingham, Ala., to 805 Mangum Ave., Selma, Ala., 36701. (Jefferson County Medical Society.)

Beaird, Joseph B., Jr., present Birmingham, Ala., to 1025 S. 18th St., 35205. (Jefferson County Medical Society.)

Bennett, Austen L., III, present Tuscaloosa, Ala., to 3756 Valley Head Rd., Birmingham, Ala., 35223. (Tuscaloosa County Medical Society.)

Bibb, Robert C., present Huntsville, Ala., to Med. Arts Bldg., 35801. (Madison County Medical Society.)

Bowers, David E., present Decatur, Ala., to 1121 Somerville Rd., 35601. (Limestone County Medical Society.)

Bradley, Merrill N., present Birmingham, Ala., to 909 S. 18th St., 35205. (Jefferson County Medical Society.)

Branscomb, Ben V., present Birmingham, Ala., to 1919—7th Ave. S., 35233. (Jefferson County Medical Society.)

Browning, James P., present Mobile, Ala., to 5017 Moffat Rd., 36618. (Mobile County Medical Society.)

Burton, Otto L., present Montgomery, Ala., to P. O. Box 4008, 36103. (Montgomery County Medical Society.)

Cantrell, William C., present Florence, Ala., to 1914 Fairfax Dr., 35630. (Lauderdale County Medical Society.)

Chapman, Jerome C., present Birmingham, Ala., to 2643 Park Lane Circle, 35223. (Jefferson County Medical Society.)

Church, Jackie Lee, present Huntsville, Ala., to 210 Woodmont Circle, Nashville, Tenn., 37205. (Madison County Medical Society.)

Clements, Ralph M., present Tuscaloosa, Ala., to Station 3, 35401. (Tuscaloosa County Medical Society.)

Cleveland, Richard D., present Dothan, Ala., to P. O. Box 1249, 36301. (Houston County Medical Society.)

Culpepper, Rufus A., present Cullman, Ala., to P. O. Box 13, 35055. (Cullman County Medical Society.)

Dabbs, Jack M., present Birmingham, Ala., to 652 Lomb Ave., 35211. (Jefferson County Medical Society.)

Davis, Harwell G., II, present Birmingham, Ala., to 1844 Briarmeadow Rd., 35210. (Jefferson County Medical Society.)

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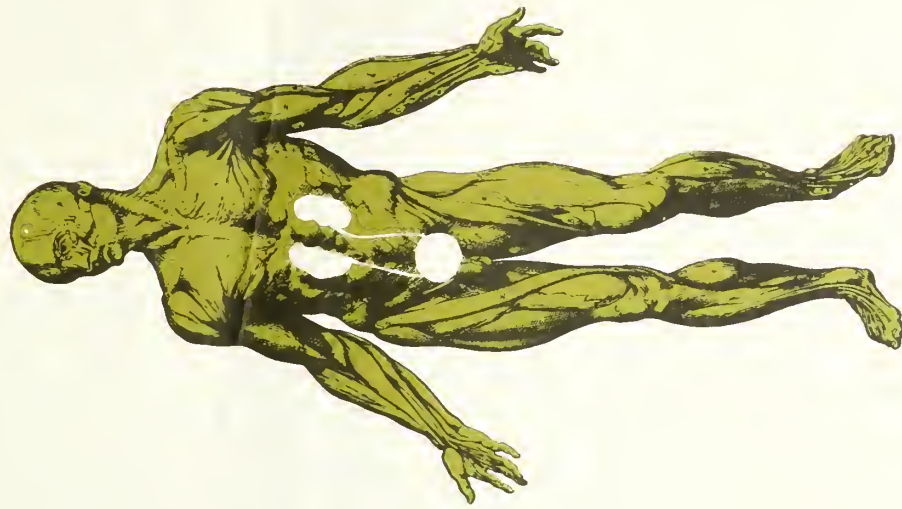
VITAL STATISTICS

(Continued from Page 401)

- Dawson, James R., present Uniontown, Ala., to Milledgeville, Ga., 31061. (Perry County Medical Society.)
- Flowers, Paul R., present Dothan, Ala., to P. O. Box 1249, 36301. (Houston County Medical Society.)
- Frantz, William E., present Gadsden, Ala., to 101½ S. 12th St., 35901. (Etowah County Medical Society.)
- Friedman, Louis L., present Birmingham, Ala., to 2151 Highland Ave., 35205. (Jefferson County Medical Society.)
- Haughton, L. D., Jr., present Dothan, Ala., to P. O. Box 1249, 36301. (Houston County Medical Society.)
- Holland, Claude M., Jr., present Birmingham, Ala., to 2109 Magnolia Ave., 35205. (Jefferson County Medical Society.)
- Hood, William G., Jr., present Selma, Ala., to P. O. Box 1022, 36701. (Dallas County Medical Society.)
- Jackson, James E., present Huntsville, Ala., to 812 Gallatin St., 35801. (Madison County Medical Society.)
- Johnson, Charles M., present Birmingham, Ala., to 2088 Montreat Circle, 35216. (Jefferson County Medical Society.)
- Jones, James M., Jr., present Dothan, Ala., to P. O. Box 1249, 36301. (Houston County Medical Society.)
- Jordan, James L., Jr., present Huntsville, Ala., to P. O. Box 23, 35804. (Madison County Medical Society.)
- Kimbrough, James E., present Grove Hill, Ala., to P. O. Box 637, 36451. (Clarke County Medical Society.)
- Lewis, Thomas K., present Lake Forest, Ill., to 130 Southern Circle, Mississippi City, Miss., 39562. (Jefferson County Medical Society.)
- McCrory, Ellann, present Andalusia, Ala., to George L. Lanier Hospital, Langdale, Ala., 36864. (Covington County Medical Society.)
- Mertins, Paul S., Jr., present Montgomery, Ala., to 4 Catoma St., 36104. (Montgomery County Medical Society.)
- Morton, Lloyd E., present Foley, Ala., to Magnolia Springs, Ala., 36555. (Baldwin County Medical Society.)
- Narramore, M. L., present Birmingham, Ala., to 900 S. 18th St., 35205. (Jefferson County Medical Society.)
- Partridge, Clarence V., present Mobile, Ala., to 211 S. Catherine St., 36604. (Mobile County Medical Society.)
- Patton, Thomas B., present Birmingham, Ala., to 909 S. 18th St., 35205. (Jefferson County Medical Society.)
- Pearce, Walter N., Jr., present Birmingham, Ala., to 1025 S. 18th St., 35205. (Jefferson County Medical Society.)
- Pleasant, William A., present Decatur, Ala., to 315 Church St., N. W., 35601. (Morgan County Medical Society.)
- Pyle, Charles R., present Guin, Ala., to Hamilton, Ala., 35563. (Marion County Medical Society.)
- Rayfield, John D., present Sylacauga, Ala., to 105 Walnut Rd., 35150. (Talladega County Medical Society.)
- Reagan, Jack E., present Birmingham, Ala., to P. O. Box 1161, Florence, Ala., 35630. (Jefferson County Medical Society.)
- Russell, Richard O., Jr., present Birmingham, Ala., to Cardiovascular Research Lab., Latter Day Saints Hosp., Salt Lake City, Utah, 84103. (Jefferson County Medical Society.)
- Sanders, Buford B., present Birmingham, Ala., to 652 Lomb Ave., 35211. (Jefferson County Medical Society.)
- Sanford, Howard M., Jr., present Jasper, Ala., to Oxford, Ala., 36201. (Walker County Medical Society.)

(Continued on Page 407)

muscle spasm



GENITOURINARY TRACT SPASM

VITAL STATISTICS

(Continued from Page 401)

- Dawson, James R., present Uniontown, Ala., to Milledgeville, Ga., 31061. (Perry County Medical Society.)
- Flowers, Paul R., present Dothan, Ala., to P. O. Box 1249, 36301. (Houston County Medical Society.)
- Frantz, William E., present Gadsden, Ala., to 101½ S. 12th St., 35901. (Etowah County Medical Society.)
- Friedman, Louis L., present Birmingham, Ala., to 2151 Highland Ave., 35205. (Jefferson County Medical Society.)
- Haughton, L. D., Jr., present Dothan, Ala., to P. O. Box 1249, 36301. (Houston County Medical Society.)
- Holland, Claude M., Jr., present Birmingham, Ala., to 2109 Magnolia Ave., 35205. (Jefferson County Medical Society.)
- Hood, William G., Jr., present Selma, Ala., to P. O. Box 1022, 36701. (Dallas County Medical Society.)
- Jackson, James E., present Huntsville, Ala., to 812 Gallatin St., 35801. (Madison County Medical Society.)
- Johnson, Charles M., present Birmingham, Ala., to 2088 Montreat Circle, 35216. (Jefferson County Medical Society.)
- Jones, James M., Jr., present Dothan, Ala., to P. O. Box 1249, 36301. (Houston County Medical Society.)
- Jordan, James L., Jr., present Huntsville, Ala., to P. O. Box 23, 35804. (Madison County Medical Society.)
- Kimbrough, James E., present Grove Hill, Ala., to P. O. Box 637, 36451. (Clarke County Medical Society.)
- Lewis, Thomas K., present Lake Forest, Ill., to 130 Southern Circle, Mississippi City, Miss., 39562. (Jefferson County Medical Society.)
- McCrory, Ellann, present Andalusia, Ala., to George L. Lanier Hospital, Langdale, Ala., 36864. (Covington County Medical Society.)
- Mertins, Paul S., Jr., present Montgomery, Ala., to 4 Catoma St., 36104. (Montgomery County Medical Society.)
- Morton, Lloyd E., present Foley, Ala., to Magnolia Springs, Ala., 36555. (Baldwin County Medical Society.)
- Narramore, M. L., present Birmingham, Ala., to 900 S. 18th St., 35205. (Jefferson County Medical Society.)
- Partridge, Clarence V., present Mobile, Ala., to 211 S. Catherine St., 36604. (Mobile County Medical Society.)
- Patton, Thomas B., present Birmingham, Ala., to 909 S. 18th St., 35205. (Jefferson County Medical Society.)
- Pearce, Walter N., Jr., present Birmingham, Ala., to 1025 S. 18th St., 35205. (Jefferson County Medical Society.)
- Pleasant, William A., present Decatur, Ala., to 315 Church St., N. W., 35601. (Morgan County Medical Society.)
- Pyle, Charles R., present Guin, Ala., to Hamilton, Ala., 35563. (Marion County Medical Society.)
- Rayfield, John D., present Sylacauga, Ala., to 105 Walnut Rd., 35150. (Talladega County Medical Society.)
- Reagan, Jack E., present Birmingham, Ala., to P. O. Box 1161, Florence, Ala., 35630. (Jefferson County Medical Society.)
- Russell, Richard O., Jr., present Birmingham, Ala., to Cardiovascular Research Lab., Latter Day Saints Hosp., Salt Lake City, Utah, 84103. (Jefferson County Medical Society.)
- Sanders, Buford B., present Birmingham, Ala., to 652 Lomb Ave., 35211. (Jefferson County Medical Society.)
- Sanford, Howard M., Jr., present Jasper, Ala., to Oxford, Ala., 36201. (Walker County Medical Society.)

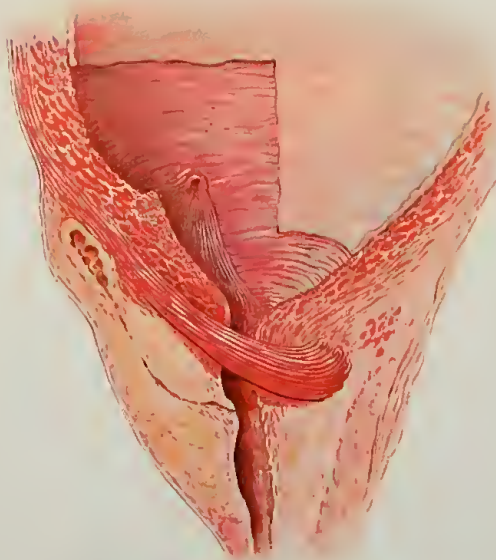
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GENITOURINARY TRACT SPASM

Spastic conditions of the genitourinary tract as a result of inflammation or calculi are often difficult to treat due to the combination of voluntary and involuntary neural control of the system. Urine enters the bladder in periodic spurts brought about by successive peristaltic waves that begin in the smooth muscle of the renal pelvis and pass downward. The normal anatomical constrictions of the ureters are of clinical importance because they frequently inhibit the passage of small calculi.

Abnormal distention of the bladder as a result of an obstructed outlet due to stricture of the urethra or an adenomatous prostate often requires consideration of the smooth muscle involved. Because prostatic tubules invade the internal smooth muscle layer of the urethra, unusual enlargement of the prostate impedes the sphincter-like action of this muscle. Micturition, with inflammation of the bladder and attending atonicity, is more frequent and in cases of long duration (e.g. tuberculosis) contracture of the bladder approaches a permanent state. The clinical importance of the smooth musculature in the urinary tract cannot be overemphasized.

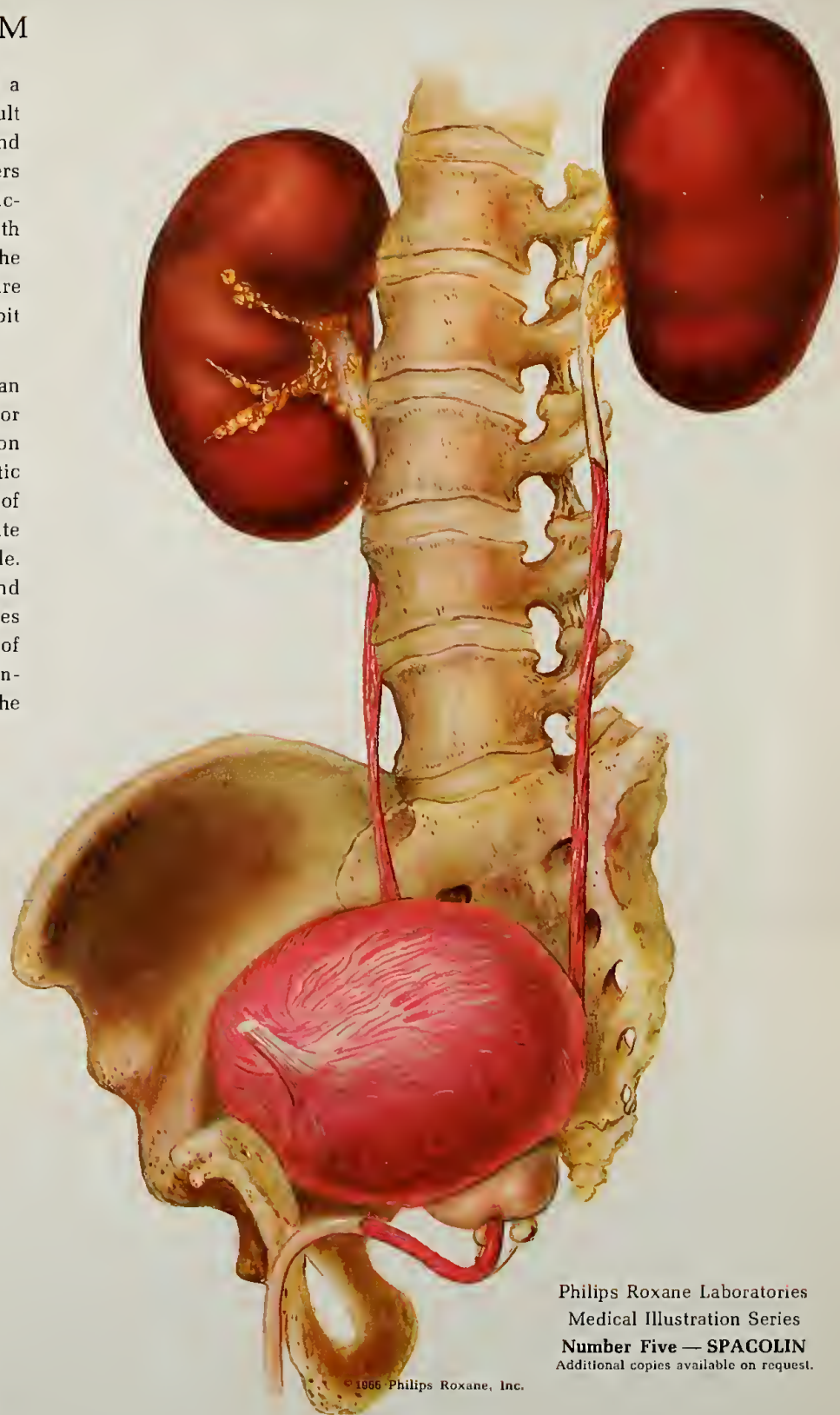
SMOOTH MUSCULATURE OF THE URINARY TRACT



Artist's rendering of the urinary bladder illustrating the trigone, circular, and longitudinal layers of smooth muscle. Note the spray of fibers which passes from the trigone to the wall of the urethra.

The ureters are composed of three layers of smooth muscle, an inner longitudinal layer, a middle circular layer, and an outer longitudinal layer which course the entire length from the renal pelvis to the wall of the bladder where the ureters open as slit-like apertures for the most part retaining their own musculature. They are fairly uniform in size except for three slightly constricted portions, one at the ureteropelvic junction, the second at the pelvic brim, and the third at the extreme lower end of the ureter as it passes through the bladder wall.

The smooth musculature of the bladder is constituted in three general layers with poorly defined boundaries. The outer layer is composed mainly of longitudinal fibers which extend to the neck of the bladder where certain bundles unite to form a loop around the anterior surface of the vesical orifice. Within this loop, the circular layer forms a wedge below the outlet and flows down the urethra in an oblique direction surrounding the canal as a thin layer which, when stimulated, provides an upward pull on the urethral canal. The upward pull of this loop combined with the downward pull of the longitudinal



Philips Roxane Laboratories
Medical Illustration Series
Number Five — SPACOLIN
Additional copies available on request.

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layer gives a sphincter-like action to the musculature at the bladder neck although no true sphincter is present. The musculature of the trigone arises from the longitudinal muscle fibers of each ureter and spreads over the muscles of the bladder wall.

The male urethra is for the most part mucous membrane which contains loosely arranged longitudinal and circular smooth muscle layers. In the prostatic part at the neck of the bladder, the circular layer is highly developed and acts in harmony with the descending array of circular fibers of the bladder contributing to the sphincter-like control of the neck.

Spacolin (Alverine citrate) is a musculotropic antispasmodic which acts directly on the smooth muscle of the genitourinary tract with rapid onset and long duration. Because the parasympathetic nervous system is avoided, anticholinergic side effects do not occur. Moreover, Spacolin, (Alverine citrate) is ideally suited for relief of smooth muscle spasm in the presence of prostatic hypertrophy.

FAST RELIEF OF SMOOTH MUSCLE SPASM



INDICATIONS: Smooth muscle spasmolytic for use in spastic colon, spastic conditions of the gastrointestinal tract, biliary dyskinesia, cholecystitis, spasm associated with peptic ulcer, achalasia, pylorospasm, spasm attendant to diarrhea, spastic conditions of the genitourinary tract attributable to inflammation and calculi, certain primary dysmenorrheas and as an aid in cystoscopic, esophagoscopic and gastroscopic examinations.

SIDE EFFECTS: In common with other smooth muscle depressants, Spacolin temporarily lowers blood pressure.

DOSAGE: One tablet after meals 1 to 3 times daily at discretion of physician. When treating spasm associated with peptic ulcer, achalasia or pylorospasm, administer tablets $\frac{1}{2}$ hour before meals. In dysmenorrhea, one tablet 3 times daily starting at onset of discomfort.

SUPPLIED: Bottles of 100 and 500-120 mg. tablets.

*Antacid and dietary measures are of primary importance in ulcer treatment and should not be neglected.

- A potent muscarinic counter-spasmodic.
- Little or no effect on normal muscle tonicity and motility.
- Spasmodic effect is $2\frac{1}{2}$ to 3 times stronger than papaverine.
- Unrelated to atropine or atropine-like drugs.
- Therefore no atropine-like side effects such as dry mouth, blurred vision, constipation and urinary retention.
- Not contraindicated in glaucoma or prostatic hypertrophy.

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Syncuma, Duphaston, Measles Vaccine, Acusul and Acutuss are other significant products for your company.

VITAL STATISTICS

(Continued from Page 402)

Scofield, George F., present Birmingham, Ala., to 1025 S. 18th St., 35205. (Jefferson County Medical Society.)

Scott, Walter F., Jr., present Birmingham, Ala., to 1025 S. 18th St., 35205. (Jefferson County Medical Society.)

Walker, James A., present Ft. Payne, Ala., to 3504 Mill Run Rd., Birmingham, Ala., 35223. (DeKalb County Medical Society.)

Wilhite, Glenn E., present Montgomery, Ala., to VA Hosp., Lake City, Fla., 32055. (Montgomery County Medical Society.)

TRANSFERS

Berrey, Ruth R., present Birmingham, Ala., to Rt. 3, Box 219, Clayton, Ala., 36016. (Transfer from nonmember Jefferson County to member Barbour County.)

APPOINTMENTS

Dr. Bennie N. Moore, Haleyville, Ala., has been appointed to the Winston County Board of Censors to replace Dr. Robert F. Blake, Haleyville, resigned.

COUNTY SOCIETIES MEET

CHILTON COUNTY

The Chilton County Medical Society held a business meeting at the Chilton County Hospital on August 23. President Joe H. Johnson, M. D., presided. Five members of the Society were present.

★ ★ ★

LAUDERDALE COUNTY

Dr. Wyatt Simpson of Florence, was the principal speaker at the August meeting of the Lauderdale County Medical Society. Dr. Simpson gave a Case Report on an unusual surgical case.

Dr. M. C. Dunn, President, presided at the business session with 27 members present.

There will be a business meeting at the Coffee Memorial Hospital on September 12.

DeKALB COUNTY

A social and business meeting was held on September 6 by the DeKalb County Medical Society at the DeKalb County General Hospital, Dr. William Noble, President, presiding. Ten members attended the meeting.

A hospital disaster drill involving the entire staff followed the business meeting.

The next meeting will be held on October 4, 7:30 p. m., at the DeKalb County General Hospital.

★ ★ ★

RANDOLPH COUNTY

Dr. W. D. Israel presided at the September 1 business meeting of the Randolph County Medical Society with eight members present. The meeting was held at the Randolph County Hospital. Among other business there was a discussion of building plans.

The October 10th meeting will be held at the Randolph County Hospital at 6 p. m.

Heredity And Arthritis

Recent studies of identical twins provide "an almost unanswerable argument that heredity is not a dominant factor in rheumatoid arthritis," according to a report from the Arthritis Foundation. Of eight sets of identical twins from different parts of the nation, one twin has unmistakable rheumatoid arthritis, while the other has none. Population studies made by Dr. Ephraim P. Engleman in California, and by the National Institutes of Health among Pima Indians in Arizona and Blackfeet Indians in Montana provide additional arguments against the heredity theory of rheumatoid arthritis. Distribution of the disease among these diverse groups, and of the rheumatoid factor in their blood was found to differ markedly from what it would be if heredity were a dominant factor.—*Med. World News*, Dec. 31, p. 9.



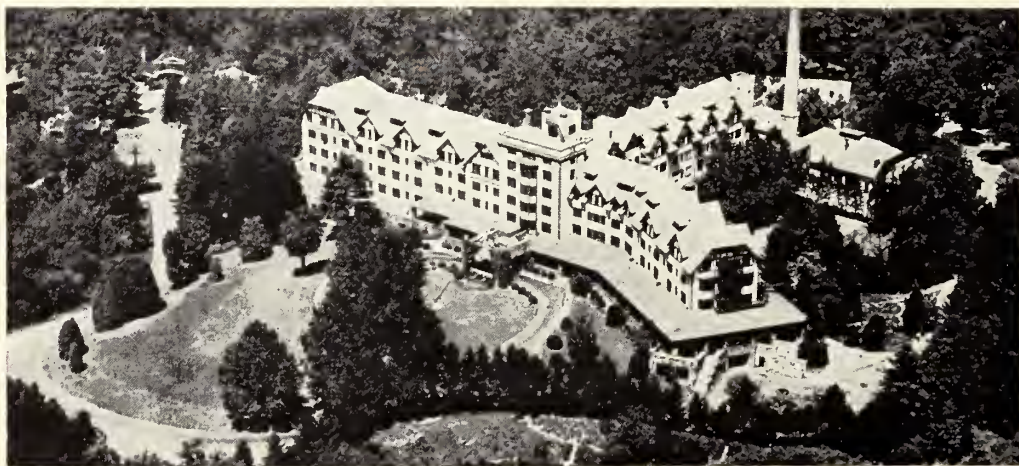
"When did you first encounter this morbid desire to pay your old bill?"

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An institution for the diagnosis and treatment of psychiatric and neurological illnesses, rest, convalescence, drug and alcohol habituation.

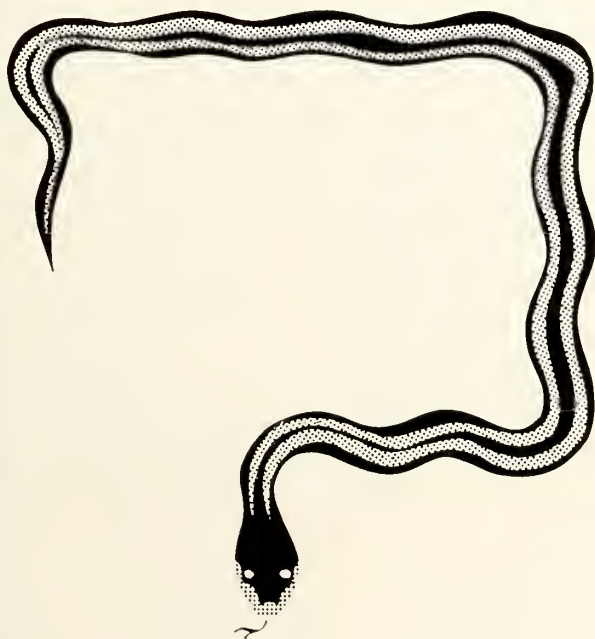
Insulin coma, electroshock and psychotherapy are employed. The institution is equipped with complete laboratory facilities, including electroencephalography and x-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

CHARMS THE HYPERACTIVE COLON



"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."

CANTIL®

(mepenzolate bromide)

helps restore normal motility and tone

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide) —25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL —containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1. Riese, J.A.; Amer. J. Gastroent. 28:541 (Nov.) 1957

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Penicillin Use May Be Discontinued

Prophylactic use of penicillin for rheumatic fever apparently may be discontinued in selected older adolescents and young adults without heart disease who have remained free of recurrent rheumatic fever for three to five years. Dr. Alvan R. Feinstein and his associates of New York City reported a two-year study of 161 teen-age patients, approximately half of whom received oral penicillin daily; the rest received an inactive sugar pill (placebo). The attack rate for streptococcal infections was approximately the same for both groups. The recurrence rate for rheumatic fever was 0.7% in the prophylactic and 1.4% in the placebo group.

—*Modern Med.*, Nov. 22, pp. 71, 75.



"This is really an old-line hospital . . . here's a drawing of the founder . . . he was a famous anesthesiologist!"

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

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**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



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HOSPITAL**
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DACTILASE®

Each tablet contains:

Dactil® (piperidolate hydrochloride), 50 mg.;
Standardized cellulolytic* enzyme, 2 mg.;
Standardized amylolytic enzyme, 15 mg.;
Standardized proteolytic enzyme, 10 mg.;
Pancreatin 3X** (source of lipolytic activity),
100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established.

**As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

WHEN
STOMACHS
ARE ALL
BUTTERFLIES

AND
GAS

In chronic or acute indigestion, fluttery, gassy stomachs obtain prompt, gratifying relief through the antispasmodic, surface anesthetic and enzymatic activity of Dactilase. Dactilase decreases hypermotility and pain and reduces the production of gas. Dactilase does not induce stasis, but helps restore normal tone. It has little or no effect on enzyme secretions, but *adds* enzymes, thus contributing to the digestive efficiency of the patient.

Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

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Laetrile Worthless in Treatment of Cancer

Laetrile, a compound consisting principally of amygdalin, a glucoside obtained from peach and apricot kernels, has been offered through various channels in the United States and Canada for the alleged control and treatment of cancer.

Leading scientific and government sources have pronounced the treatment to be worthless and Laetrile is now contraband in interstate commerce.

The American Cancer Society reported in 1963: "... After careful study of the literature and other information available to it, the American Cancer Society has found no acceptable evidence that treatment with Laetrile results in any objective benefit in the treatment of cancer. . . ."

The Food and Drug Administration states that it "has seen no competent, scientific evidence that Laetrile is effective for the treatment of cancer."

In 1962, the Cancer Advisory Council of the California State Department of Public Health, after an investigation that extended over two years and included a review of the case records of 144 cancer patients who had been treated with Laetrile, announced its conclusion that the compound was valueless.

As long ago as 1953 the Cancer Commission of the California Medical Association reported that in 44 cases treated with Laetrile, there was no evidence of anti-cancer activity. The Commission noted that amygdalin can be bought for about 20¢ a gram. One patient told the Commission that the price for Laetrile injections quoted to him by a doctor was \$50 apiece. E. T. Krebs, Jr., testifying before the Commission on the matter of price, said the development of Laetrile had been very costly.

Advocates of the Laetrile treatment claim that when amygdalin comes in contact with beta glucuronidase, an enzyme occurring in malignant tissues, a chemical reaction takes place that produces hydrogen cyanide. Advocates of the treatment state that the hydro-

gen cyanide thus formed prevents respiration of the malignant tissue and thus kills it, while normal tissues remain unaffected.

They claim also that a deficiency of "Vitamin B₁₅H₈" (pangametin) and/or a deficiency of chymotrypsin, an enzyme secreted by the pancreas, are contributory factors in cancer.

E. T. Krebs, M. D., a leading exponent of Laetrile, is co-author of a paper which states that it is "possible to double the number of recoveries of cancer, when Laetrile and chymotrypsin are given with Vitamin B₁₅H₈." These theories stem from the writings of John Beard, a Scottish zoologist, who published in 1902 his belief that cancer cells are identical with the trophoblast cells that are produced in the body in the womb at an early stage of pregnancy. These cells, Beard alleged, are normally killed by pancreatic chymotrypsin, but a deficiency of this enzyme in the body will permit them to spread and become cancer.

The theory of the Laetrile treatment has been labeled invalid by competent researchers.

Dr. Jesse P. Greenstein, late chief of the biochemistry laboratory of the National Cancer Institute, stated that the enzyme beta glucuronidase, alleged by Laetrile advocates to be concentrated in malignant tissues, is actually much more concentrated in the normal spleen and liver.

Four Canadian researchers, in a study published in the Canadian Medical Association Journal, May 15, 1965, reported that Laetrile had no significant effect on respiration of malignant tissues.

In addition to Dr. E. T. Krebs, other advocates and publicizers of the Beard theories and/or the Laetrile treatment have included: Dr. Krebs' son, E. T. Krebs, Jr., a biochemist; the John Beard Memorial Foundation, San Francisco, California, described by the Food and Drug Administration as an "association"

(Continued on Page 414)

**WARMTH
FOR COLD
HANDS AND FEET**



For cold hands and feet, nothing beats hot stoves—but they *are* awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients *like* Gerilid and *know* they are getting relief.

GERILID™

Each chewable tablet contains:
nicotinic acid (niacin) 75 mg. and
aminoacetic acid (glycine) 750 mg.

Administration and Dosage: One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

Side effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

Supplied: Packages of 50 chewable tablets.

Also available in liquid form as Geriliquid®, in bottles of 8 and 16 ounces.

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LAETRILE RATED WORTHLESS

(Continued from Page 412)

between Dr. Krebs and his son; Howard H. Beard, Ph.D., Director of the Beard Biochemical Laboratory, Fort Worth, Texas; and the McNaughton Foundation, Montreal, Canada.

The compound had been distributed in the United States by Dr. Krebs and by Hale Laboratories, and in Canada by Biozymes International Ltd. and the McNaughton Foundation.

The Laetrile treatment has received substantial public notice through a series of magazine articles written by Glenn D. Kittler, and a book, "Laetrile: Control for Cancer" by the same author, which is sold in a paperback edition.

In November 1961, E. T. Krebs, Jr., and the John Beard Memorial Foundation were indicted in San Francisco Federal Court for shipping in interstate commerce a misbranded drug, "pangamic acid, or Vitamin B₁₅," that had not been cleared by the FDA. Krebs and the Foundation pleaded guilty, and on May 5, 1962, were fined a total of \$3,755. Krebs was placed on probation for three years; one of the conditions of the probation was that neither he nor the Foundation would make any interstate shipments of any new drug, including Laetrile, without an FDA-approved New Drug Application.

In 1963, E. T. Krebs, Jr., filed a New Drug Application with the Food and Drug Administration for Laetrile. The application was denied by the FDA because "the data submitted were inconclusive and insufficient to demonstrate either efficacy or safety."

In Canada, the McNaughton Foundation began to distribute Laetrile to physicians, but was prohibited from continuing such distribution by the Canadian Food and Drug Directorate. The Directorate contended that Laetrile was dangerous and did not meet the legal requirements for proof of efficacy and safety. In April 1964, the Foundation secured

a temporary injunction against enforcement of the CFDD's ruling, but in July 1964, a Superior Court judge in Montreal lifted the injunction and upheld the right of Canadian food and drug officials to prohibit distribution of the drug. The effect of this ruling was to reinstate the Food and Drug Directorate's ban on distribution of Laetrile in Canada.

At this date, Laetrile is therefore contraband both in Canada and in interstate commerce in the United States.

The Food and Drug Administration reported in September 1965, that the promoters of Laetrile agreed to a permanent court injunction against further distribution of the drug and that it would go out of business. Ernst T. Krebs, Sr., M. D. of San Francisco pleaded "no contest" to criminal contempt charges that he disobeyed a restraining order prohibiting shipment of Laetrile in interstate commerce.



"I don't understand the doctor . . . not a word about how well I look this morning!"

WHAT'S THE
COMMON
DENOMINATOR? ... IRON



In fact, there's as much iron...250 mg.
...in a 5 cc. ampul of Imferon (iron dextran
injection) as in a pint of whole blood.
When iron deficient patients are intolerant
of oral iron...or orally administered iron
proves ineffective or impractical...or if
the patient cannot be relied upon to take oral
iron as prescribed, Imferon (iron dextran
injection) dependably increases hemoglobin
and rapidly replenishes iron reserves.

IMFERON® (iron dextran injection)

IN BRIEF: ACTION AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

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The Physician As A Resource In Mental Health Planning In Alabama

William H. Tragle, M. D., Lucille Jolley, M. S.

and Betty Ivey, M. S. W.

The problems associated with breakdown in mental health have long been known to physicians and over the years they have attempted in many cases to alleviate the distress resulting from emotional problems while diagnosing and treating the physical disorders. With the increase in mental health problems, the role of the general physician in mental health planning has been under consideration by psychiatrists and other mental health specialists for several years. In 1958 the Southern Regional Education Board called a meeting in Atlanta during which these specialists studied this problem, drew up plans for specific needs in psychiatric training and attempted to find ways by which the plans could be implemented. In October 1962 Dr. Daniel Blain presented a plan to the Personnel Section of the National Congress on Mental Health, American Medical Association which would aid in supplying needed manpower. This plan included a basic inservice training program. Among the most critical inservice training needs listed was "training general physicians in basic psychiatry."¹

Purpose of This Study: In surveys of recent years conducted among householders in several representative counties in Alabama, a majority of the respondents indicated that they would prefer to turn to the physician for treatment in mental illness. As a result of the preference indicated in these surveys and

the recognition of the physician as a significant resource in planning for Comprehensive Community Based Mental Health Services, an attempt was made in 1965 to study the resource by a survey of the physicians in Alabama.

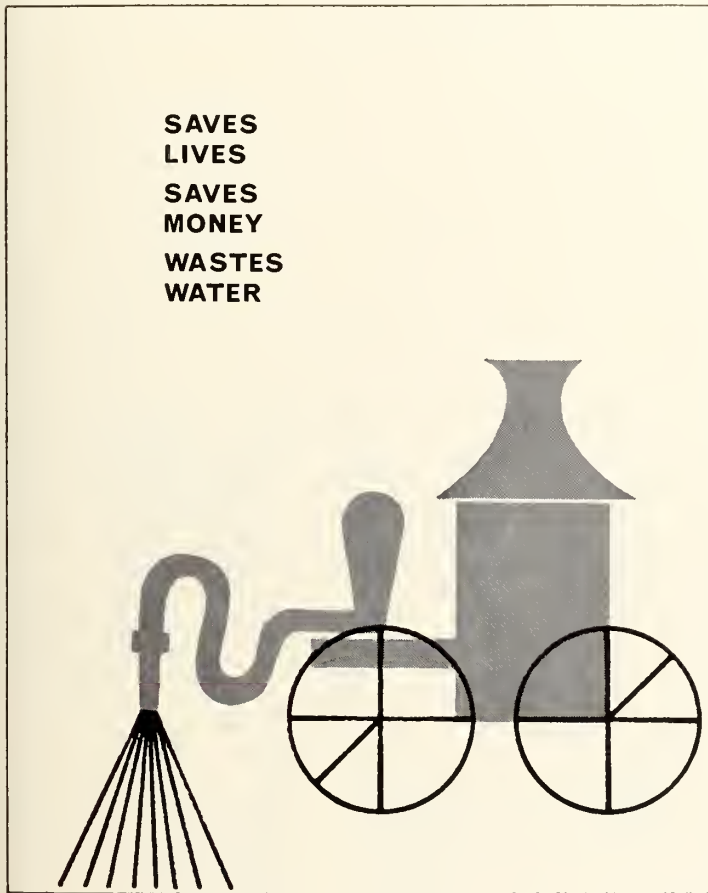
Method: A questionnaire was submitted to a 10 per cent sample of the physicians in the state. Seven questions were included in the questionnaire aimed toward obtaining (1) a description of the sample according to fields of practice and the psychiatric training of the physicians, (2) the opinion of physicians as to the degree of psychiatric training needed, (3) an estimate and description of the mental health problems in the average patient load of each respondent, (4) the effort how being made by physicians to treat those problems of mental health, (5) the other resources used in treatment of these cases, (6) identification of areas in which the physician was handicapped by the lack of sufficient resources for referral, and (7) the opinions of the physicians about the lack of other treatment facilities. Of the 244 questionnaires submitted, 127 (52 per cent of the sample) were returned; however, not all physicians answered each question.

Description of the Sample: Over one-half of the respondents (55 per cent) represented the fields of general practice, internal medicine, and surgery, and these fields were augmented by the 15.7 per cent who indicated general practice, internal medicine, and surgery as secondary practice. Of those physicians responding 101 were in full time private practice and five were in part-time. Full

¹Blain, Daniel, M. D., "Development of an Inpatient Service Training Program for Mental Health Personnel," paper presented in the regional conference on Inservice Training for Mental Health Programs, Region IV, Charleston, South Carolina, November 5-8, 1963; Pages 37-39.

(Continued on Page 418)

**SAVES
LIVES
SAVES
MONEY
WASTES
WATER**



METAHYDRIN (trichlormethiazide) is prescribed by physicians because it not only approximates the diuretic efficacy of parenteral meralluride injection . . . but, *it is the least expensive of all "brand-name" thiazides.* Therefore, when you prescribe METAHYDRIN (trichlormethiazide) your patients receive the thiazide diuretic that removes a little more salt and water than earlier thiazides, with relatively less loss of potassium . . . and, it's therapy they can more easily afford . . . *only pennies a day.*

METAHYDRIN®

(trichlormethiazide)

oral diuretic

Dosage: One 2 or 4 mg. tablet once or twice daily.

Precautions: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

Side Effects: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have occasionally been noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by the administration of thiazides.

Contraindications: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

How Supplied: Bottles of 100 and 1000 tablets.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 5320



LAKESIDE

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THE PHYSICIAN AS A RESOURCE

(Continued from Page 416)

TABLE I

Fields of Primary and Secondary Practice
by Number and by Rank

Fields of Practice	Primary	Secondary	Total
General Practice	48	3	51
Surgery	12	13	25
Internal Medicine	12	4	16
Obstetrics & Gynecology	6	3	9
Orthopedic Surgery	6	0	6
Pediatrics	5	0	5
Cardiovascular Disease	3	2	5
Neurosurgery	4	0	4
Dermatology	3	0	3
Pathology	3	0	3
Roentgenology, Radiology	3	0	3
Urology	3	0	3
Anesthesiology	2	0	2
Clinical Pathology	0	2	2
Public Health	2	0	2
Psychiatry & Neurology	2	0	2
Pulmonary Disease	2	0	2
Obstetrics	1	1	2
Pediatric Surgery	1	1	2
Ophthalmology	1	1	2
Neurology	0	1	1
Allergy	1	0	1
Otology, Laryngology, Rhinology	1	0	1
Psychiatry	1	0	1
Plastic Surgery	1	0	1
Thoracic Surgery	1	0	1
Endocrinology	1	0	1
Industrial	1	0	1
Student Health	1	0	1
Total	127	31	158

time institutional practice was reported by eight and part-time by one. "Other" full time practice was checked by eight and one indicated "other" part-time practice. Only one reported psychiatry as a primary field, two reported psychiatry and neurology, four reported neurosurgery, and one indicated neurology as a secondary field.

The majority of physicians (106) reported that they had didactic courses in psychiatry in undergraduate medical education; 64 had clinical clerkship in psychiatry, and 17 had postgraduate training in psychiatry. The need for increased psychiatric training for all medical students was voiced by 96 of the 123 replying. However, only 54 of the 117 reply-

ing favored psychiatric postgraduate training for all physicians.

Description of Patient Load: In describing their patient loads 77 per cent responded to a question about the age of patients. Of the 99 reporting 39 stated that the percentage of patients under age 18 in their patient load would be 10 per cent or less; 23 indicated patients in this age group would be in the 21 per cent to 30 per cent bracket; and 15 placed them in the 31 per cent to 50 per cent bracket. Only six described their patient loads as having 95 per cent to 99 per cent under age 18, which would agree with the number reporting primary fields as pediatrics (5) and one in pediatric surgery.

For better identification the problems of mental health were divided into (1) those patients presenting persistent symptoms of minor mental illness, (2) those presenting persistent symptoms of major mental illness, (3) those showing evidence of mental retardation, and (4) those with a compulsive drinking problem. Physicians were asked to give the percentage of current patients falling into these categories. Their responses are recorded in the following table.

TABLE II

Patient Distribution by Problem Classification
and Percentage

Problem Classification	1-5%	6-20%	21-35%	36-50%	Over 50%
Symptoms of minor mental illness	20	46	24	7	14
Symptoms of major mental illness	80	15	3	0	2
Retardation	81	9	0	0	0
Compulsive drinking	11	9	7	5	1
Total	192	79	34	12	17

According to the above table the designated problems of mental health are found primarily in less than 50 per cent of the current patient loads of the physicians responding and are most frequently found in the 1-5 per cent bracket. The magnitude of these

(Continued on Page 420)

**BRING IT DOWN
AND
KEEP IT DOWN**

100
102

Metatensin lowers blood pressure and keeps it low—effectively and economically. It combines reserpine with trichlormethiazide which affords more potent saluresis with less loss of potassium than from earlier thiazides. Reserpine contributes antihypertensive effect by relieving anxiety and tension. Metatensin is well-tolerated over long periods; with its effectiveness and economy it assures antihypertensive therapy you and your patients can stay with.

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Each scored tablet contains:
METAHYDRIN® (trichlormethiazide)
2 mg. or 4 mg. and
Reserpine 0.1 mg.

Usual adult dose: One tablet twice daily. **Precautions and side effects:** Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery.

Contraindications: Complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.

Supplied: Metatensin tablets, 2 mg., 4 mg.—bottles of 100 and 1000.

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THE PHYSICIAN AS A RESOURCE

(Continued from Page 418)

problems in current practice was pointed up by the percentage of replies to this question as shown in the following table:

Only one physician thought compulsive drinking a predominant problem in current practice, reporting 99 per cent of the current patients as having this problem.

Present Treatment Efforts: The majority of physicians seemed to feel responsibility to offer treatment to patients presenting these problems in mental health. Only 29 per cent reported that they recognized significant difficulty but did not specifically treat or refer these patients to other resources for treatment. One stated that in 99 per cent of the cases where the problem was recognized no treatment was given and no referral was made. In the majority of the replies (25) the physicians indicated that in 15 per cent and less of their cases the difficulty was recognized but neither treatment nor referral was offered, and twelve indicated that this was the situation with 21 to 50 per cent of their cases.

Responses to the questionnaire showed that 59 per cent of the physicians attempted to treat these problems themselves. Of this number, 53 per cent attempted treatment in over 50 per cent of the patients presenting these problems. Only 22 per cent of the physicians reported that they were unable to treat these patients because of the patient's withdrawal, and in this number the problem of the patient's withdrawal from treatment was found primarily in the 1-10 per cent group.

Referral Resources: Only two physicians did not reply to a question which attempted to identify needed services for referral. Of the 125 responding 62 indicated that they had felt treatment was needed by patients presenting problems in mental health but treatment was not received because facilities or services were not available. Response to the question and the division of opinion seems to indicate the need for a survey of resources

in order to identify the needed facilities and services which can be made available to physicians who wish to refer patients. The following table shows the use made of present resources by the physicians:

The private psychiatrist was the preferred resource. Since the number of psychiatrists in Alabama in 1965 was 54 and 29 per cent of the physicians pointed out that in 1-10 per cent of their patient loads the need for treatment was recognized but none was given, it seems apparent that this resource is overburdened. Of the physicians responding 35 per cent reported that they were unable to refer patients because private psychiatric treatment was not available and 24 per cent indicated that treatment was not given because of the lack of neurological resources. One hundred physicians indicated they would prefer to treat patients with mental health problems with consultation from a mental health specialist.

Mental Health Clinics were used by 55 per cent of the physicians and 88 per cent favored establishment of mental health clinics in their counties. According to 35 per cent of the responses referral could not be made because clinic service was not available. In 1965 there were nine public mental health or psychiatric clinics operating full time and nine on a part-time basis. Table III shows

TABLE III
Mental Health Problems in Current Practice by Problem Classification and Physicians Responses

Problem Classification	Physicians Responses	Per Cent
Symptoms of minor mental illness	111	87
Symptoms of major mental illness	99	77
Retardation	90	70
Compulsive drinking	33	26

that patients having persistent symptoms of minor mental illness were more numerous. Since the majority of physicians preferred to remain in charge of treatment with consultation from mental health specialists and since they favored establishment of mental

(Continued on Page 422)

When depressed patients say:



"I can't sleep at night"



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NORPRAMIN[®]
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Norpramin (desipramine hydrochloride) often reverses the signs and symptoms of depression including sleep disturbances, feeling of sadness, guilt, anxiety, worthlessness and bodily complaints without physical basis. In 2-5 days most patients become more hopeful, active and less weighed down by their problems.

Norpramin (desipramine hydrochloride) has only slight sedative qualities, nevertheless sleep disturbances and restlessness are relieved as depression is lifted. If anxiety or tension develop or persist a tranquilizer may be added or dosage reduced. Side effects are usually mild, occurring in about 1 of 4 patients.

Indications: In moderate to severe depression—neurotic or psychotic. **Dosage:** Optimal results are obtained at a dosage of two 25 mg. tablets t.i.d. (150 mg./day). **Contraindications and Precautions:** Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of an MAO inhibitor. Safety in human pregnancy has not been established. **Adverse Effects:** Usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste", sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs. **Supplied:** Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

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THE PHYSICIAN AS A RESOURCE

(Continued from Page 420)

health clinics this may indicate the need for more mental health clinics and more emphasis on the use of clinic personnel in a consulting capacity.

Use of the local general hospital for care of psychiatric patients was low. The physicians using this resource was 32 per cent although 61 per cent indicated they preferred to remain in charge of treatment while patients are in a local hospital, and 68 per cent favored establishment of a psychiatric unit in the local hospital. The fact that no beds were available kept 36 per cent from referring to the local hospital. This would seem to indicate that local hospitalization is preferred, but resources are lacking. This is further emphasized by the fact that 11 per cent reported referral to out-of-county general hospitals. It seems that hospitalization is seen as an important resource since 62 per cent referred patients to a state or VA mental hospital and 49 per cent to private psychiatric hospitals. Physicians indicating that patients did not receive treatment because they were not accepted for admissions to state or VA mental hospitals numbered 18-20 per cent. A majority of the physicians (77 per cent) stated they wished to remain in charge of the patient's treatment after return from a state mental hospital; 57 per cent favored establishment of a Day or Night Hospital in their counties.

Conclusions: The preference of individuals for treatment by the physicians has been explored in previous surveys. The fact that the majority continued in treatment with the physician when this was possible further substantiates this fact. Physicians reporting that needed treatment was not provided because patients and relatives were resistive to referral to other facilities for such treatment was small, amounting to 30 per cent.

By the number of responses physicians seem to indicate that mental retardation is a problem for which they do not want or feel able to provide treatment. Of the responses

70 per cent reported evidences of mental retardation in 1-20 per cent of their cases; 48 per cent indicated they referred cases to the state school for retardation; and 92 per cent stated that patients did not receive treatment because they were not accepted by the school for admission, while 24 per cent responded that these patients did not receive treatment because no local special class or other similar facility was available for the retarded.

The alcoholic received little attention apparently. Compulsive drinking was reported by 25 per cent of the physicians and 48 per cent of those reporting patients with this problem considered them to represent 10 per cent or less of their patient load. In considering referral 40 per cent said they did not refer to alcoholism clinics, 22 per cent did not answer the question, and 37 per cent indicated they made referrals to such clinics. Since there are only five alcoholism clinics in the state, such cases may have been included in referral to VA mental hospitals, private psychiatric hospitals, mental health clinics, or may have remained under the physicians' care with local hospitalization.

The survey verifies the fact that, with the possible exception of the mental retardation problem, physicians are an important resource to be considered in Comprehensive Community Based Mental Health Planning. The willingness to continue and to extend their present coverage of patients with problems in mental health is indicated. They point out a recognition of their role by favoring increased psychiatric training for all medical students and they identify in this survey some of the problems interfering with the extension of their services in the mental health field.

The Physician as a Resource in Mental Health Planning in Alabama: Among these problems is the need of local facilities for those patients requiring hospitalization while remaining under the physician's care. The need for additional training was implied in

(Continued on Page 428)

In colicky infants Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying and improves feeding patterns. It permits sleep and rest for patient and family. The less than hypnotic amount of phenobarbital in the recommended dose affords a mild, calming action and enhances the antispasmodic action of Piptal (pipenzolate bromide). The latter drug, as reported in the medical literature, has a favorable ratio of effectiveness to side-effects which is unusual in anticholinergics and thus is particularly appropriate to pediatric use.

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QUIETS PARENTS
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**PEDIATRIC PIPTAL®
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each cc. contains 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol.

Pleasant-tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be given by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. It is contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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When the diarrhea sufferer has run the gamut of home remedies without success, pleasant-tasting CREMOMYCIN can answer the call for help. It is counted on to consolidate fluid stools, soothe intestinal inflammation, inhibit enteric pathogens, detoxify putrefactive materials — usually within a few hours.

CREMOMYCIN combines the bacteriostatic succinylsulfathiazole and neomycin, with tannic acid, a sorbent and protective demulcents, kaolin and pectin, for comprehensive control of diarrhea.

INDICATIONS: Diarrhea.

CONTRAINDICATIONS: Do not use in intestinal obstruction, extensive ulceration of bowel, or diverticulosis; in hypersensitivity to sulfonamides or neomycin; in pregnancy at term, in premature infants, or during first week of life in the newborn.

WARNINGS: Use only after critical appraisal in patients with hepatic or renal damage, urinary obstruction, or blood dyscrasias. Fatal hypersensitivity reactions and blood dyscrasias reported with use of sulfonamides. Consider periodic blood, hepatic and renal function tests during intermittent or prolonged use.

PRECAUTIONS: *Succinylsulfathiazole:* Use with caution in patients with history of significant allergies and/or asthma. Continued use requires supplementary vitamins B₁ and K. *Neomycin:*

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can provide relief



neuromuscular block during anesthesia if neomycin is administered cooperatively in large doses when renal function is impaired. Watch for overgrowth of nonsusceptible organisms. Considerability of ototoxicity and nephrotoxicity with prolonged use.

CONTRAINDICATIONS: As with all sulfonamides: Headache, malaise, anorexia, GI symptoms, hepatitis, pancreatitis, blood dyscrasias, rash, drug fever, rash, conjunctival and scleral injection, purpura, hematuria, and crystalluria have been noted. Decreased output of thiamine and decreased synthesis of folic acid have been reported. *Neomycin:* Nausea, loose stools.

PRECAUTIONS: Before prescribing or administering, read package circular with instructions available on request.

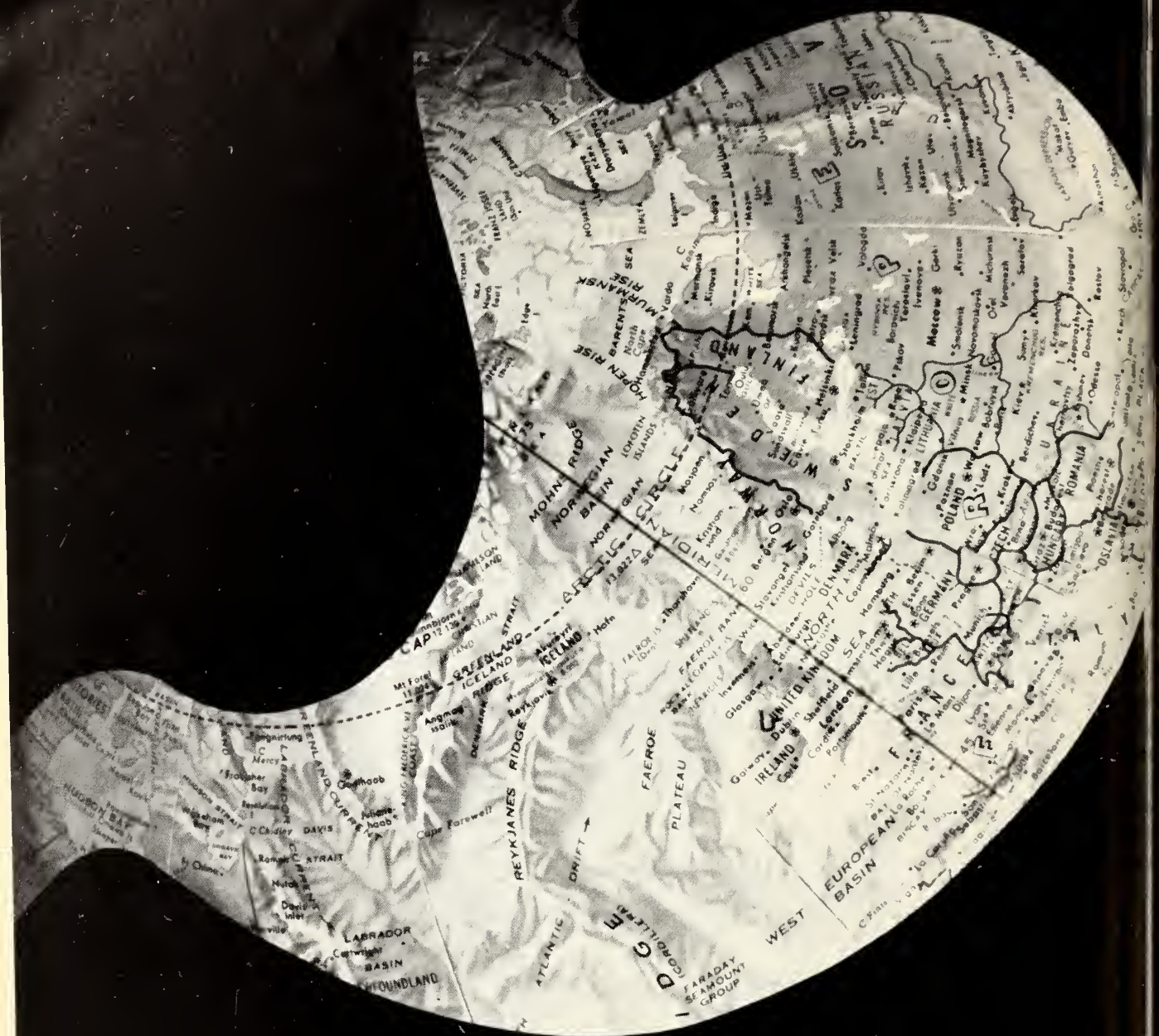
It promptly relieves diarrheal distress

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Merck Sharp & Dohme Division of Merck & Co., Inc., West Point, Pa.

Today's theory is tomorrow's therapy



The “Socio- geographic” mystery

Why is one man's gastric ulcer another man's duodenal?



Geographic variation in the *incidence* of peptic ulcer is a familiar fact. But the proclivity of certain *kinds* of ulcer for certain geographic areas is a recently recognized phenomenon.^{1,2}

For example, in one particular Norwegian fishing village there is a tendency for patients to develop a gastric ulcer; anywhere else in Norway, ulcers are usually duodenal. Peruvians high in the Andes have more gastric ulcers than their compatriots in the lowlands. Why? Nobody knows.

Social variations, too. Even in the same geographic areas there are interesting variations. An Englishman's ulcer depends on his social standing—professional men suffer with duodenal ulcers, while workingmen have more of the gastric variety. In southern India the pattern is reversed. Here, duodenal ulcers are common among laborers and agricultural workers and rare among the upper classes.

Investigators are exploring every possible theoretical avenue in their search for the cause of peptic ulcer. Of all the factors implicated in ulcerogenesis, the one that is generally acknowledged to be of primary importance is hypersecretion of gastric acid.³⁻⁸ Or, as one author states it: "The medical management of peptic ulcer pharmacologically is, in the final analysis, concerned largely with the effective inhibition of peptic activity."³

Robinul (glycopyrrolate) provides potent, rapid, specific antisecretory action as confirmed by gastric analyses and x-ray evidence of clinical effectiveness.^{3,7,9-12} It relieves pain with "impressive" promptness.⁸ Quickly alleviates acute discomfort, and effectively counteracts gnawing pain, preprandial midepigastric pain, burning and other ulcer symptoms.⁷ Suppression of nocturnal pain is "outstanding."¹³ Maximally effective doses may be given with minimal side effects, and the incidence of unwanted anticholinergic effects is negligible.^{3,7-14}

No matter what the ulcer theory...the fact is that

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(glycopyrrolate)

promotes the essential ulcer-healing environment

HOBINS

(brief summary follows)

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(Continued from Page 422)

Robinul[®]

(glycopyrrolate)

**promotes the
essential ulcer-healing
environment**

Indications: In addition to its primary indications for duodenal and gastric ulcer, Robinul (glycopyrrolate) is indicated for other GI conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Dosage should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet 3 times a day: in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.); Robinul Forte (glycopyrrolate 2 mg.); Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming.) In bottles of 100 and 500 scored tablets.

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TABLE IV

Referrals to Other Resources by Type of Resource
and by Number of Physicians

Referral Resources	Physicians					
	Referring		Not Referring		No Response	
Private Psychiatrists	111	87.5%	6	4%	10	7%
State or VA Mental Hospital	80	62.0	27	21	20	16
Private Psychiatric Hospital	63	49.0	40	32	24	18
Local General Hospital	41	32.0	61	48	25	19
Out of County General Hospital	14	11.0	85	66	28	22
Mental Health Clinic	71	55.9	36	28	20	16
State School for Retardation	61	48.0	42	33	24	18
Alcoholism Clinic	47	37.0	52	40	28	22

the desire for consultation with mental health specialists. This possibly could indicate a need for more emphasis on the consultant role of mental health clinic, psychiatric hospital personnel, and private psychiatrists and neurologists in addition to the acceptance of referrals. There seems to be an indication of a need to include alcoholism in the overall treatment facilities for mental illness. In cases of mental retardation, the need of local supported facilities for training is suggested by referrals to the "school" for mentally retarded and the lack of local special classes. Consultation with mental health specialists may provide diagnostic service to better differentiate the retarded as those who will require only custodial care from those who can benefit by training, and differentiate the organic-based retardation from the emotionally retarded.

Historically, the physician has attempted to deal with these problems to the best of his knowledge and with the facilities available. It seems now that he is willing and able to continue this role and that he asks only for more knowledge and better local facilities.



The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—The Advisory Committee on Obstetrics and Gynecology to the Food and Drug Administration reported that in a nine-month study it could find “no adequate scientific data” that birth control pills are “unsafe for human use.”

But the committee said that there are “possible theoretic risks” in the use of oral contraceptives. For this reason, the committee recommended further, extensive tests to learn more about possible side-effects and to improve surveillance of the drugs.

The FDA accepted this proposal and other committee recommendations, including discontinuance of time limitations on use of oral contraceptives.

FDA Commissioner Dr. James Goddard said the agency would like to start studies on up to 50,000 women next year and eventually on as many as 500,000 women. The biggest drug studies thus far have involved only 20,000 or 30,000 women.

“The committee finds no adequate scientific data, at this time, proving these compounds unsafe for human use. It has nevertheless taken full cognizance of certain very infrequent but serious side-effects and of possible theoretic risks suggested by animal experimental data and by some of the metabolic changes in human beings,” the committee concluded.

“In the final analysis, each physician must evaluate the advantages and the risks of this method of contraception in comparison with other available methods or with no contraception at all. He can do this wisely only when there is presented to him dispassionate scientific knowledge of the available data.”

The FDA said it would lift shortly its recommended limits on use of the pill. The agency has required that manufacturers state on their labels and advise physicians that the oral contraceptives should be used by individuals for no more than four years because of concern about the unknown long-term effect of the medications. FDA officials and the advisory committee agreed that there isn't any sound scientific rationale for the restriction, because of the current lack of data that would indicate that the pills are dangerous.

Other steps that FDA officials said would be taken as a result of the report include imposition of uniform labeling requirements on all types of oral contraceptives, elimination of product-by-product variations that have confused physicians and allowed companies to make different promotional claims, and restrictions of the use of the products for some medical purposes, such as prevention of abortion and treating lack of menstruation or painful menstruation, as well as conception control.

“The oral contraceptives present society with problems unique in the history of human therapeutics,” the committee said. “Never will so many people have taken such potent drugs voluntarily over such a protracted period for an objective other than for the control of disease. These compounds, furthermore, furnish almost completely effective contraception, for the first time available to the medically indigent, as well as the socially privileged. These factors render the usual standards for safety and surveillance inadequate. Their necessary revision must

(Continued next Page)

be carefully planned and tested, lest the health and social benefits derived from these contraceptives be seriously reduced. Probably no substance, even common table salt, and certainly no effective drug can be taken over a long period of time without some risk, albeit minimal. There will always be a sensitive individual who may react adversely to any drug, and the oral contraceptives cannot be made free of such adverse potentials, which must be recognized and kept under continual surveillance. The potential dangers must also be carefully balanced against the health and social benefits that effective contraceptives provide for the individual woman and society.

"The oral contraceptives currently in use are probably not those that will be employed 10 or even five years hence. Drugs with even less potentially adverse effect, utilizable in smaller dosage, will undoubtedly be developed through continuing research."

The American Medical Association opposed legislation that would make prescribing drugs by generic name mandatory under the federal program of medical care for dependents of military personnel.

The AMA expressed its opposition in a letter to a joint House-Senate committee that was considering such legislation. The letter said:

"The generic name refers to the active chemical ingredient of the drug and not to the finished product which is supplied to the patient. In order that it may be dispensed, the tradename manufacturer, by way of a specific formulation, processes the drug to its final form. For example, included in a manufacturer's preparation of a tablet form of a drug may be a number of variables such as the crystalline size, the nature of the excipients, the coloring agents and flavors, the tableting pressures, coating films, and the orientation within the tablet.

"Since the finished product, depending on

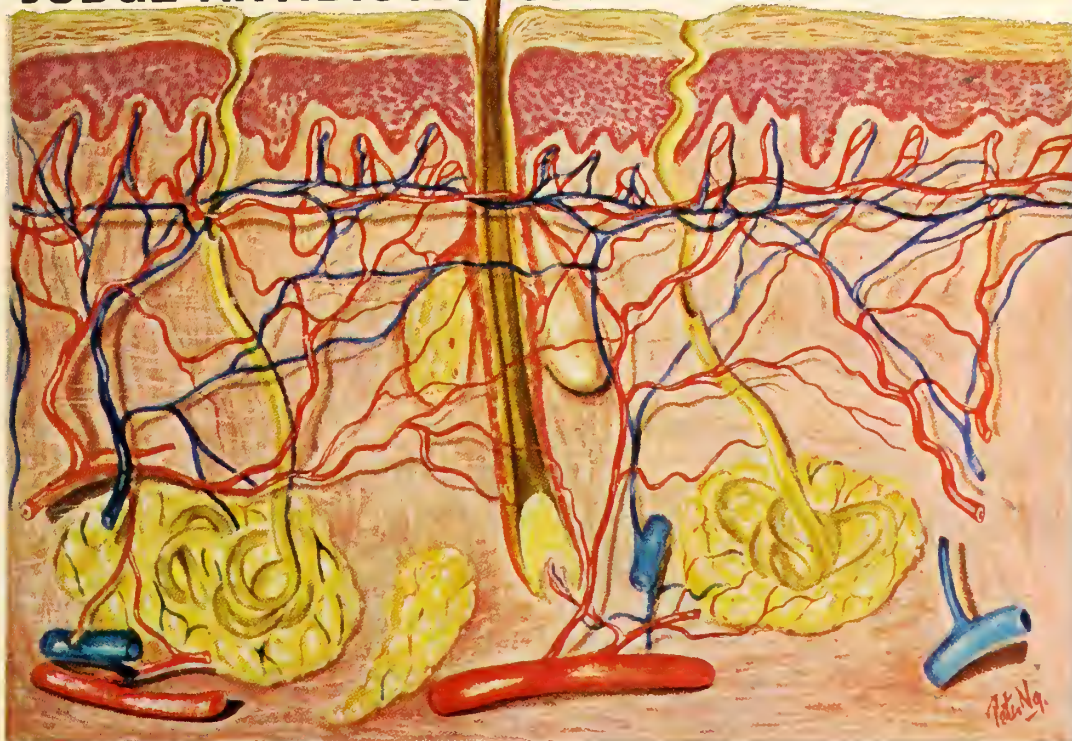
who has manufactured it, may emerge in any one of several forms, it becomes apparent that a generic-named drug supplied by one manufacturer may differ to a significant degree from the same generic-named drug supplied by another manufacturer. Yet, if the physician is compelled to prescribe by generic name, he would have no control as to which drug is used by the pharmacist in filling the prescription.

"The coating, the disintegration time, the solubility, the choice of vehicle or base, these and other factors may be extremely important to the physician who chooses a drug for his patient. He must have the opportunity to specify that drug containing the variables he has found suitable to the treatment of his patient. Further, where his patient is receiving the same medication over a period of time, successive refills of the same prescription with products of different manufacturers, could lead to variations in therapeutic response which may mislead him.

"It has been suggested that generic prescribing would result in substantial savings. This may be true in some instances, but certainly not in all. Generic prescribing would allow the pharmacist to furnish the patient with that manufactured drug he, the pharmacist, has chosen. It may or may not be less expensive. In any event, it is the pharmacist who sets the final price.

"The argument of generic prescribing versus trade name prescribing has been heard at scientific gatherings, seen in scientific publications, and debated in the committees of Congress. But as to one element of the discussion, almost all physicians agree. For a variety of sound medical reasons, the choice of whether to prescribe generically or by brand name should be that of the treating physician. No law should be passed which may compel him to use in every case, a generic or non-proprietary drug. Such a law would not be in the best interest of his patient."

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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of non-susceptible organisms and/or fungi. Appropriate measures should be taken if this occurs.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

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a new formulation that relieves pain in tension headache and neuralgia

Dialog is a combination of 15 mg allobarbital and 300 mg acetaminophen. Allobarbital, a proven barbiturate, provides desirable sedation in patients experiencing pain and discomfort. Acetaminophen is a nonsalicylate analgesic-antipyretic, well tolerated and useful in a wide range of mildly painful and febrile conditions.

Dialog is well tolerated, even by those sensitive to aspirin. It is nonirritating to the gastrointestinal tract and, in recommended dosage, has no adverse effects on the kidneys.

- Raises the pain threshold
- Suppresses the pain-producing mechanism
- Reduces emotional tension

For tension headache

DialogTM (allobarbital and acetaminophen CIBA)

Indications: For relief of pain and discomfort of simple headache; neuralgia, myalgia, and musculoskeletal pain; dysmenorrhea; bursitis; sinusitis; fibrositis. Also indicated to reduce fever and to relieve discomfort due to respiratory infections, influenza, and other febrile conditions.

Contraindication: Not recommended during pregnancy.

Caution: May be habit-forming. Do not use in patients sensitive to barbiturates or in those with moderate to severe hepatic disease.

Side Effects: Nausea, transitory dizziness, rash. Overdosage of allobarbital produces symptoms typical of acute barbiturate excess.

Dosage: *Adults:* 1 or 2 tablets every 4 hours. Not to exceed 8 tablets in 24 hours. *Children 6 to 12:* 1/2 to 1 tablet every 4 hours. Not to exceed 4 tablets in 24 hours.

Supplied: *Tablets* (white, scored), each containing 15 mg allobarbital and 300 mg acetaminophen; units of 3 bottles of 30.

For your convenience — prescription-size bottle of 30.

CIBA Pharmaceutical Company, Summit, N. J.

C I B A

MASA Records Another Successful Legislative Year

The 1966 Special Session of the Alabama Legislature, called by Governor Wallace to distribute \$44 million in surplus Special Education Trust Funds, ended six weeks of labors on September 2. More than 35 bills and resolutions of more or less interest to medicine were considered by the lawmakers.

To make recommendations on the proposed bills, a joint meeting of the Continuing Legislative Study Council and the Committee on Legislation was held at Montgomery August 6. It can now be reported that every bill endorsed by the two groups was enacted into law, and every bill opposed by them was defeated.

The hardest fight came over House Bill 118, a bill to designate the Department of Public Health as the official State agency to prepare and administer a comprehensive health plan. The proposed law would enable the Department to make a long-range health plan, utilizing to maximum advantage Federal funds expected to become available under provisions of a bill now pending in Congress.

First opposition to HB 118 came from the State Department of Pensions and Security, which feared that it was a surreptitious attempt to gain control over Title XIX of Public Law 89-97, popularly known as Medicare. Assured by the Health Department that such was not the case, Pensions and Security brought forth an amendment nailing that fact into the bill.

Next came a delegation of chiropractors seeking further amendment of the bill to exempt their profession, along with dentists and optometrists, from the bill's operation. Since the bill does not involve the clinical practice of the healing arts, the Health Department accepted this amendment, also.

In the meantime, the bill had sailed through the House and waited only a final vote in the

Senate. At this juncture a delegation of optometrists appeared to demand still another amendment containing two provisions: (1) new language pinpointing exemption of optometrists from the bill and, (2) inclusion of an optometrist as a member of the planning advisory committee.

The Health Department refused to accept this amendment, principally on the ground that an optometrist should not be a member of a committee dealing with a matter in which his profession was not involved.

A legislative stalemate was threatened with both physicians and optometrists appealing to Legislators from their home communities to support their respective positions. Finally the issue was resolved when the optometrists abandoned their demand for representation on the advisory committee if a restatement of their exemption were included.

The Health Department, taking the position that giving optometrists a "second exemption" from a bill which did not concern them in the first place could do no harm, agreed to the amendment and the bill was speedily passed.

Then a new hitch developed. In the dispute over the optometrist issue it was discovered that someone had neglected to include the chiropractor amendment in the package of amendments. Governor Wallace corrected this oversight in an executive amendment, which won speedy concurrence of both House and Senate in the closing hours of the Legislature.

Several other bills brought Alabama Physicians, individually or as members of delegations, into the legislative fray. One was a House Resolution calling for establishment of a second medical college at Mobile. Dr. M. Vaun Adams of Mobile, a member of the

Board of Censors, made several appearances before House and Senate committees in support of the Resolution. Dr. J. O. Finney, President of the Medical Association of the State of Alabama; Dr. Robert Parker, Chairman of the Board of Censors, and Dean S. Richardson Hill of the Medical College of Alabama, took the position that an impartial survey of medical training facilities should first be made before attempting to determine a site for the school.

As finally adopted, a five man committee composed of the Governor, Lieut. Gov. James Allen and House Speaker Albert Brewer, plus two physicians named by them, will arrange for a survey.

Dr. Luther L. Hill of Montgomery, member of the Board of Censors, led a delegation before the House Health Committee to oppose a bill (HB 322) which would have permitted applicants for chiropractic licenses to take a basic science examination administered by the National Board of Chiropractic Examiners instead of appearing before the state board, composed entirely of educators.

During the debate, it was pointed out that no chiropractor applicant has passed Alabama's healing arts examination since it became one of the licensure requirements in 1960. Medical students customarily take the examination at the end of their second year.

The chiropractor bill never was reported out of the Health Committee, being referred to a committee of five members (of which two were chiropractor members of the House) where it died a silent death.

Another bill, strongly opposed by the Continuing Legislative Study Council and the Committee on Legislation "in principle," would have permitted the Pickens County Public Hospital Board to issue a registered nurse license for that county. MASA opposition was based on the premise that this would conflict with state licensing laws applying to all professions, was unconstitution-

Medical Center Gets \$1.6 Million Grant For Child Care

A grant of \$1.6 million has been awarded to the University of Alabama Medical Center by the Children's Bureau of the Department of Health, Education and Welfare. The funds will go for comprehensive medical and dental care of children from low-income families. The grant will be administered in conjunction with the Jefferson County Public Health Department which will be charged with screening of all patients.

The funds were made available through Public Law 8997, on a matching basis. The Medical Center, including Children's Hospital, provided the matching monies and services required to secure the grant.

Dr. Joseph Volker, vice president for health affairs, said, "A limited amount of funds were available through the Children's Bureau, and only a few such comprehensive programs will be available in the United States. This is a pioneer venture in providing 'preventive' medical and dental care for children so that they will be healthy, useful adults instead of burdens to society."

Dr. Herschel Bentley, professor and chairman of the Pediatrics Department and project director, said the funds will enable children who couldn't otherwise afford it to have inpatient and out-patient care. Both University Hospital and Children's Hospital will admit these patients. Dental care will be provided through the University of Alabama School of Dentistry, which is also associated with Children's Hospital and the Jefferson County Public Health Department.

al, and would cause a breakdown in standard examining procedures. Attempts by Pickens County legislators in both the House and Senate ultimately came to naught in the House Committee on Local Government.

A complete report on all medically-related legislation introduced at the 1966 Special Session appears on the following pages.

SENATE BILLS—1966 SPECIAL SESSION OF ALABAMA LEGISLATURE

NO.	SUBJECT	SPONSOR	PASSED BY SENATE	PASSED BY HOUSE	GOV. SIGNED	NO. OF ACT
SB 1	Establish college of traffic safety education (Same as HB 56)	Allen et al	Killed in Senate	Finance & Taxation Committee		
SB 7	Amend Code to reimburse TB Hospitals \$7.25 per diem based on 95% of rated bed capacity	Gilchrist	Killed in Senate	Finance & Taxation Committee		
SB 91	Authorize Department of Mental Health to construct 400-patient hospital (Same as HB 208)	Clark	Killed in Senate	Finance & Taxation Committee		
SB 110	Amend 1965 Act to provide representation of Alabama Pesticide Institute established therein (Same as HB 126)	Givhan	Companion bill HB 126 passed			
SB 134	Pharmacy Practice Act (Same as HB 75)	Tyson, Clark	8- 5	8-16	8-26	205
SB 135	Establish seafoods commission to replace division of Department of Conservation	Tyson	Killed in Senate	Forestry & Conservation Committee		
SB 138	Amend Act No. 867 of 1965 granting approval to publicly supported nursing schools (Same as HB 242)	Clark, Lolley, Metcalf	Killed in Senate	Public Health Committee		
SB 196	Authorize Pickens County Public Hospital Board to license nurses (Same as HB 201)	Robison	Killed in House	Local Legislation Committee		
SB 238	Establish local mental health authority; construct facilities	Horton	Indefinitely postponed by Senate			

HOUSE BILLS—1966 SPECIAL SESSION OF ALABAMA LEGISLATURE

NO.	SUBJECT	SPONSOR	PASSED BY HOUSE	PASSED BY SENATE	GOV. SIGNED	NO. OF ACT
HB 28	Exempt from civil liability physicians and rescue squads rendering emergency care at scene of an accident, casualty, or disaster	Meade	Died on House Calendar			
HB 41	Exempt from civil liability "whoever and in good faith" renders emergency care at the scene of an accident, casualty, or disaster	Jones	8- 3 with Amendments	8-24	9- 2	253

HOUSE BILLS—1966 SPECIAL SESSION OF ALABAMA LEGISLATURE

NO.	SUBJECT	SPONSOR	PASSED BY HOUSE	PASSED BY SENATE	GOV. SIGNED	NO. OF ACT
HB 47	Amend 1959 Act to exempt profit or non-profit hospitals, public or private, from state sales tax on equipment, supplies, and material	Turner, et al	Killed in House Ways & Means Committee			
HB 48	Amend Title 51 of Code to exempt profit or non-profit hospitals from state use tax on property	Turner, et al	Killed in House Ways & Means Committee			
HB 50	Amend Alabama Basic Science Law to eliminate citizenship as a requirement of applicants for examination	Turner, Cook	8- 2	8-24	8-30	223
HB 53	Amend Ala. Basic Science Law to eliminate the citizenship requirement of applicants for examination (Companion bill to HB 50 & HB 54)	Turner	Killed in House Ways & Means Committee			
HB 54	Amend Ala. Basic Science Law to provide further for requirements of applicants for examination (Companion bill to HB 50 and HB 53)	Turner	Killed in House Ways & Means Committee			
HB 56	Establish College of Traffic Safety Education (Same as SB 1)	Drake	Killed in House Ways & Means Committee			
HB 75	Pharmacy Practice Act (Same as SB 134)	Snell et al	Companion Bill SB 134 passed			
HB 77	Exempt certain medicines, medical supplies, appliances and devices from state, county, and municipal sales taxes	Bethea et al	Killed in House Ways & Means Committee			
HB 80	Create county air pollution control commissions under County Board of Health	Bethea and Dominick	Killed in House Health Committee			
HB 100	Authorize Jefferson County to issue bonds for acquiring a county hospital and outpatient facilities for treatment of indigent.	Rast et al	8- 2	8- 9	8-19	95
HB 118	Establish the State Board of Health as official State agency for preparation and administration of a comprehensive state health plan	Turnham et al	9- 2	9- 2		
HB 126	Amend 1965 Act to provide representation of Alabama Pesticide Institute established therein	Turnham	8-12	9- 2		
HB 201	Authorize Pickens County Public Hospital Board to license nurses (Same as SB 196)	Sullivan	Killed in House Local Legislation No. 1			

(Continued next Page)

HOUSE BILLS—1966 SPECIAL SESSION OF ALABAMA LEGISLATURE

NO.	SUBJECT	SPONSOR	PASSED BY HOUSE	PASSED BY SENATE	GOV. SIGNED	NO. OF ACT
HB 208	Authorize Dept. of Mental Health to construct 400-patient hospital (Same as SB 91)	Callahan et al	8-23	9- 2		
HB 242	Amend Act No. 867 (1965) granting approval to publicly supported nursing schools (Same as SB 138)	Salter		Died on House Calendar		
HB 261	Appropriates \$2 million from Educational Trust Fund for high school driver education & training	Vacca et al	Killed in House Ways and Means Committee			
HB 278	Increases appropriations for district tuberculosis sanatoria from \$92 per bed to \$276	Brewer et al	8- 3	8-24		
HB 285	Amend Title 46 of 1940 Code to grant reciprocity to graduate of foreign medical schools who have practiced 25 years in U. S.	Callahan	Killed in House Health Committee			
HB 291	Appropriates \$150,000 for air conditioning at Bryce, Searcy, and Partlow Hospitals	Heflin	Killed in House Ways and Means Committee			
HB 322	Permits Healing Arts Board to recognize examination of National Board of Chiropractic Examiners	Brown (Tusc.)	Killed in House Health Committee			
HB 323	Authorizes public hospitals to award scholarships for professional and technical personnel	Callahan	8- 5	8-23	8-30	213
HB 327	Controls traffic in Lysergic Acid Diethylamide (LSD-25) and other hallucinatory drugs	Locke	8-12	9- 2		
HB 354	Authorizes county governing bodies to call advisory elections on air pollution control	M. Bethea		Died on House Calendar		
HB 377	Establish Charity Hospital Board	M. Bethea	Killed in House Local Government Committee			
HB 384	Substitute Air Pollution Bill	Dominick and M. Bethea	Killed in House Health Committee			
HB 462	Establish local mental health authority; construct facilities	Turner et al	Killed in House Ways & Means Committee			
HJR 47	(Substitute) Resolution to authorize survey of Medical College needs in Alabama	Engel et al	8-23	9- 1		

National Survey Shows Patterns in Use of Health Services

(Reprinted from Problems in Health Services)

The most recent HIF-NORC national survey of family medical care and costs shows that almost two-thirds of the population saw a physician during 1963. While the extent of physician use changed little from earlier surveys, there was a shift in place of visit from the home to the clinic and the doctor's office.

The hospital admission rate of 13 per 100 persons for 1963 showed a slight increase over the rates of 12 recorded in 1953 and 1958. Most of this increase could be accounted for by more extensive use made of hospitals by persons 55 and over. In each of the three surveys older persons used an exceptionally large number of hospital days compared to their representation in the total population.

The proportion of persons seeing a dentist increased with each study reaching 38 per cent in 1963. Persons in families with above average incomes are much more likely to receive dental care than are those in families with lower incomes. One-fifth of the population was receiving some form of eye care by 1963.

Physician Visits

Sixty-five per cent of the population saw a physician at least once during 1963.² Practically no change occurred in the proportion seeing a physician between 1958 and 1963.³ In this same interval, the mean number of out-patient visits per person in a year appeared to increase slightly from 4.4 to 4.6.⁴

Among all age groups, children under six are *most* likely to see a physician at least once (Table I). Children 6-17 are *least* likely to see a physician. Between 1958 and 1963 there was a six percentage point drop in the proportion of these older children seeing a doctor. One explanation for this change is the influenza epidemic of 1957-58. It may be that an unusually high number of children saw a physician in that year because of it.

While young children are most likely to see a doctor at least once, persons 65 and over have a considerably higher mean number of visits per year than any other age group (Table I). The percentage of the oldest age group that sees a doctor at least once is not unusually high. However, those older people who do see a doctor are more likely to have several visits. The mean number of visits increased for all adult age groups between 1958 and 1963. The averages for children 17 or less actually showed a decline during this period.

Women are more likely to see a physician than are men. In 1963, 68 per cent of the females compared to 62 per cent of the males saw a physician (Table I). The proportions of children of each sex seeing a physician are quite similar. However, beginning with the high reproductive years (18-34) and continuing into old age, the proportion of women seeing a doctor is considerably higher.

Table I shows that not only are females more likely to see a doctor than males, but also their mean number of visits is higher. In 1963 the mean number for females was 5.0 while it was 4.1 for males. Still, this differ-

Table I
Physician Visits by Age and Sex, 1958 and 1963

Age and Sex	Per Cent of Persons Who Saw Physician During Survey Year*		Mean Number of Physician Visits Per Person-Year†	
	1958	1963	1958	1963
All Persons	66	65	4.4	4.6
0-5	73	75	4.6	4.0
6-17	64	58	2.7	2.5
18-34	68	67	4.1	5.0
35-54	64	65	4.7	4.9
55-64	66	68	5.1	5.7
65 and over	68	68	7.4	8.2
Male	62	62	3.5	4.1
Female	70	68	5.3	5.0

* See footnote 2. Includes only persons who were in the sample population for the entire twelve-month period.

† See footnote 4. The bases for these means have been adjusted for instances in which persons were in the sample population a fraction of the survey year only.

(Continued next Page)

NATIONAL SURVEY SHOWS

(Continued from Page 439)

ence of 0.9 visit is only one-half that found in 1958 when the mean number for females exceeded that for males by 1.8 visits.

The doctor's office is by far the most frequent place of visit. Eighty-three per cent of all out-patient visits in 1963 were in a doctor's office. Chart I shows the shift in visit site between 1958 and 1963. Home visits decreased as a proportion of all visits from 11 per cent to 5 per cent in this time period. Office and clinic visits each increased by three percentage points.

Traditionally, home visits have provided an

important segment of care to those persons 65 and over. In 1963 the proportion of all visits taking place at home for the 65 and over age group was still over twice the proportion for all persons (Chart I). Nevertheless, there was a major shift from home to office for the oldest group between 1958 and 1963. Home visits decreased by 14 percentage points in these five years while office visits increased by about the same as a proportion of all visits.

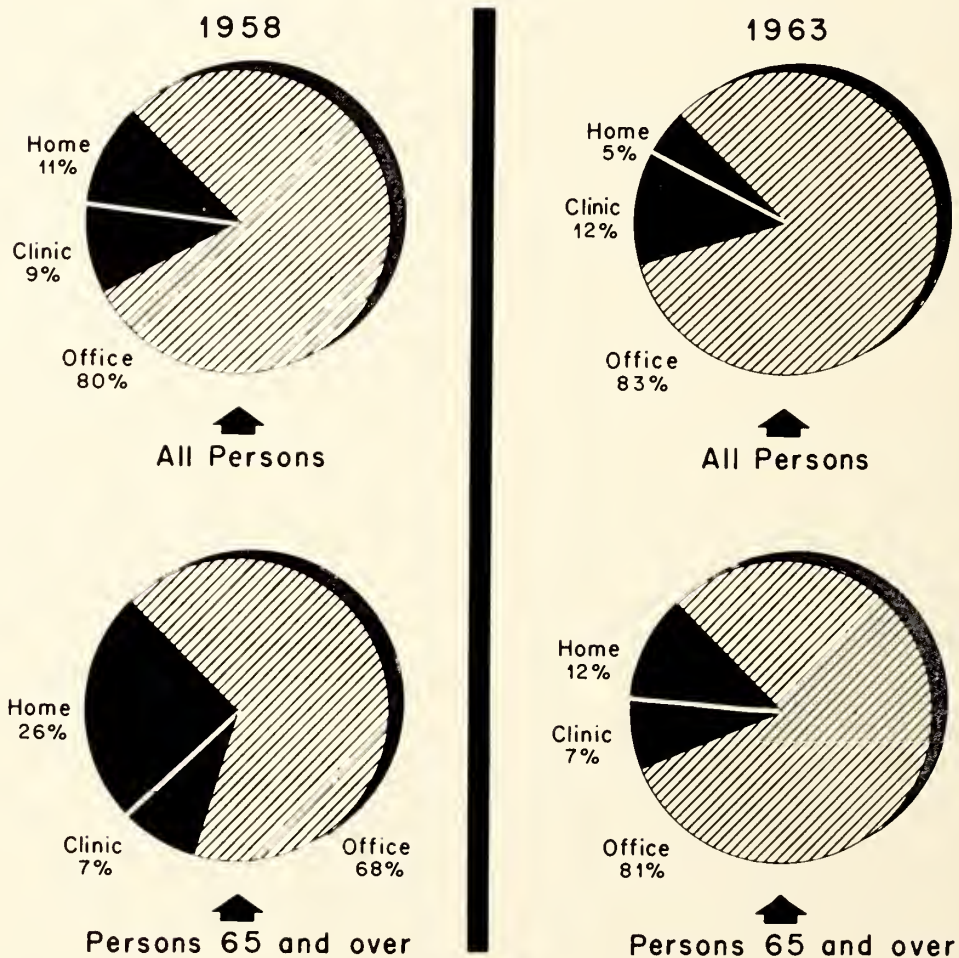
Hospital Care

There were 13 admissions to short term hospitals during 1963 for every 100 person-

(Continued on Page 443)

Chart I

Percentage of Out-of-Hospital Physician Visits* by Place of Visit for All Persons, and for Persons 65 and Over, 1958 and 1963



* See footnote 4.

SYMPOSIUM ON ADOLESCENCE

NEW ORLEANS, LOUISIANA **DECEMBER 1 - 3, 1966**

Approved for 15 hours credit by the American Academy
of General Practice

Sponsored by the

**DIVISION OF PSYCHIATRY and COMMUNITY MENTAL HEALTH
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"The Physician's Role in Mental
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"Parents of Problem Children"

"Handling of Adolescents by
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"Sexual Morality—A College
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"Drugs in the Treatment of Children
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"Learning Problems of the
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"Talking About Sex with
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Enclosed is my registration fee of \$20 for the
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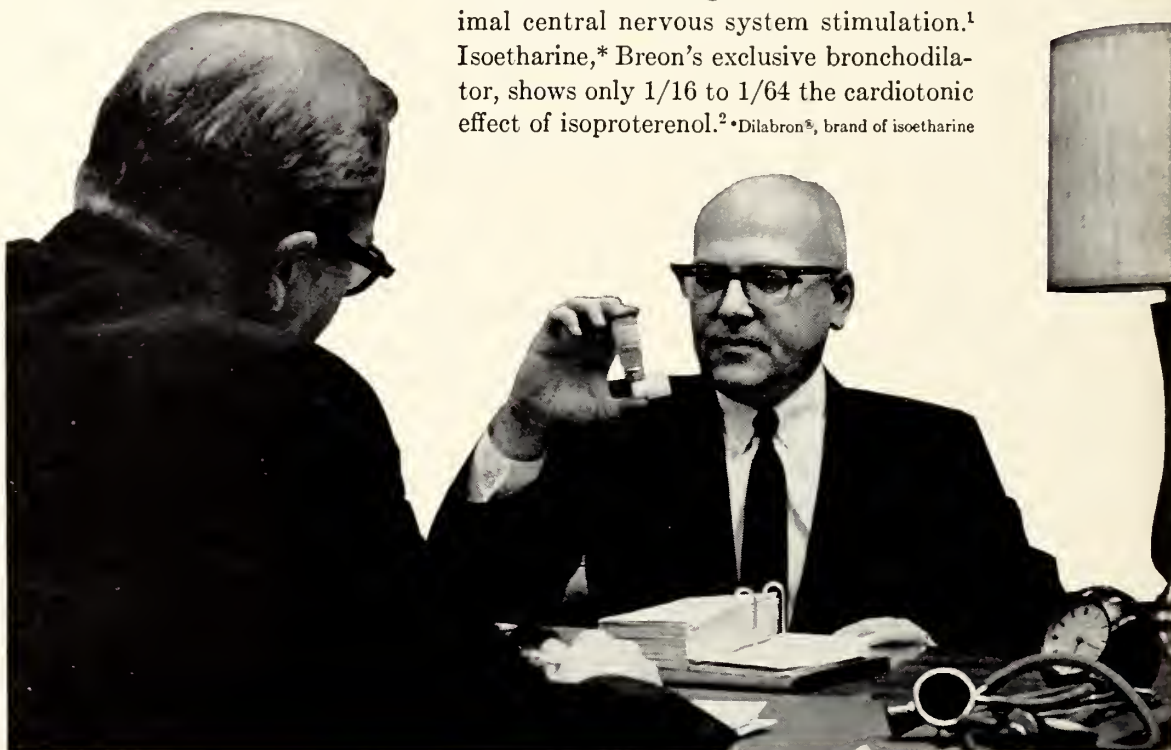
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Patients feel relaxed with Bronkometer. Its bronchodilator-decongestant action has minimal central nervous system stimulation.¹ Isoetharine,* Breon's exclusive bronchodilator, shows only 1/16 to 1/64 the cardiotoxic effect of isoproterenol.² •Dilabron®, brand of isoetharine



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isoetharine 0.6%; phenylephrine 0.125%; thenyldiamine 0.05%—Superior because it contains isoetharine

COMPOSITION: Bronkometer delivers at the mouthpiece 200 metered doses of: 350 mcg isoetharine methanesulfonate (0.6%); 70 mcg phenylephrine HCl (0.125%); and 30 mcg thenyldiamine HCl (0.05%) with saccharin, menthol and fluorochlorohydrocarbons as inert propellants. Preserved with ascorbic acid 0.1% and alcohol 30%.

RECOMMENDED DOSAGE: One or two inhalations with at least one minute between inhalations. Occasionally more may be required, however in most cases, inhalations need not be repeated more than every four hours. Dosage should be adjusted to the severity of the condition and to patient's response.

PRECAUTIONS: Bronkometer is unusually free from cardiovascular and other side effects, but the usual precautions associated with sympathomimetic amines should be observed. Bronkometer should not be administered simultaneously with epinephrine or similar compounds because of the possibility of tachycardia, although it may be alternated with these agents. Dosage must be carefully adjusted in patients with hyperthyroidism, hypertension, acute coronary disease, cardiac asthma, limited cardiac reserve and in individuals sensitive to sympathomimetic amines.

SUPPLIED: 10 ml pressurized aerosol vials complete with measured dose valve and oral nebulizer.

References: 1. Spielman, A. D.: *Curr. Therap. Res.* 3:235 (June) 1961. 2. Herschfus, J. A.; Bresnick, E.; Levinson, L.; and Segal, M. S.: *Ann. Allergy* 9:769 (Nov.-Dec.) 1951.



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NATIONAL SURVEY SHOWS

(Continued from Page 440)

years⁵ (Table II). The mean length of stay for these admissions was 7.4 days.⁶ This admission rate and length of stay resulted in 96 days of hospital care for every 100 person-years.⁷

Table II
Hospital Use by Age and Sex 1953, 1963

Age and Sex	Number of Admissions Per 100 Person-Years*		Mean Length of Stay Per Admission**		Total Hospital Days Per 100 Person-Years†	
	1953	1963	1953	1963	1953	1963
All Persons	12	13	7.4	7.4	87	95
0-17	8	7	5.3	4.5	41	30
18-54	14	16	6.8	6.6	96	108
55 and over	12	17	11.9	11.9	148	208
Male	9	10	8.3	8.0	71	83
Female	15	15	7.0	7.1	101	108

* See footnote 5.

** See footnote 6.

† See footnote 7.

In both 1953 and 1958 the over-all admission rate was 12. The admission rate in 1963 rose by one admission per 100 person-years. No change in length of stay during the ten-year period was observed while the total number of hospital days of care provided per 100 person-years increased by 10 per cent.

Hospital admission rates and length of stay are lower for children than for other age groups (Table II). Admission rates are highest for young adults, primarily because of hospitalized maternity care. Following the reproductive years, admission rates drop sharply and then begin to rise again with age reaching a second peak for the oldest people in the population. Unlike admission rates, average length of stay rises consistently with age from a low for the youngest children to a high for the oldest group.

Table II shows, for the period between 1953 and 1963, increases in hospital use for the adult groups 18-54 and 55 and over, but some decline for children 17 and under. The largest increase is found in admission rate and

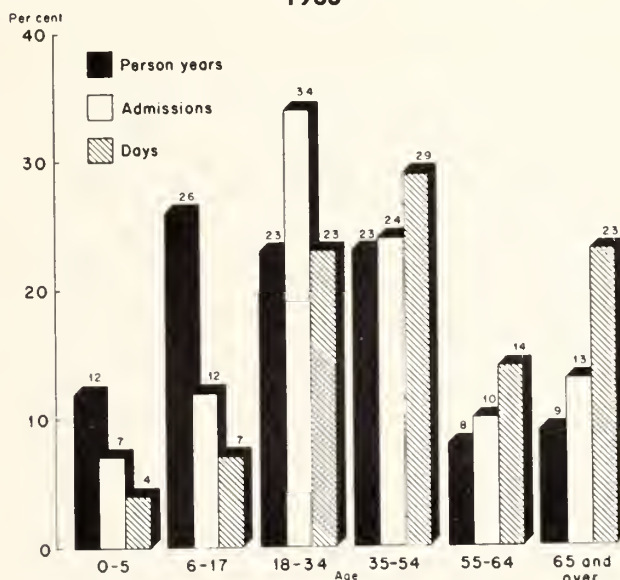
total hospital days of care for those 55 and over. During the ten-year period admissions increased for this group from 12 to 17 and hospital days increased from 148 to 208 per 100 person-years.

The admission rate for females in 1963 was 15 compared to 10 for males (Table II). The rate for females drops to 11 when admissions for deliveries are excluded. Mean length of stay was higher for males than females, but because of higher admission rates, females used more hospital days per 100 person-years.

Between 1953 and 1963 female admission rates remained the same while male rates showed an increase from 9 to 10 per 100 person-years (Table II). The difference in mean length of stay for the sexes decreased during this time period. The mean decreased for males and increased slightly for females. Hospital days increased for both groups, but the increase was greater for males.

Chart II indicates the extent to which the various age groups in 1963 contributed to the total of admissions and days in the hospital. The age group 65 and over, in relation to its proportion of the total population, was the greatest user of hospital days. The group

Chart II
Percentage Distribution of the Population, Hospital Admissions,* and Hospital Days by Age 1963**



* See footnote 6.

** See footnote 9.

18-34 had an excessive proportion of hospital admissions due to maternity care. However, these admissions are of relatively short duration and consequently, per cent of hospital days does not exceed per cent of person-years for this group.

The youngest age groups (especially the 6-17 group) use the smallest amount of hospital care in proportion to their numbers. In addition, the percentage of days they use is less than the percentage of admissions they account for due to a low mean length of stay. The middle-aged groups (34-54 and 55-64) account for proportions of all admissions only slightly greater than their proportions in the population. Their share of hospital days is larger than their share of admissions because they have longer lengths of stay.

The admission rate for persons with hospital insurance in 1963 was 14 per 100 person-years compared to 9 for those without hospital insurance. Some of the differences in hospital use patterns between these groups reflect differences in population characteristics as well as insurance status.⁸ The rate for insured persons was as high or higher for every age group. Insured males had 12 admissions per 100 person-years and insured females had 17. The corresponding rate was 7 for uninsured males and 12 for uninsured females.

While persons with hospital insurance generally have more admissions than do those without, their mean length of stay is shorter. The mean length for insured admissions in 1963 was 7.0 days compared to 8.8 for uninsured admissions.⁹ This general pattern is followed for age groups 0-17 and 55 and over. In these groups the mean length of stay was at least 3 days longer for the uninsured than the insured. However, a reversal of this relationship has been found in the middle age group (18-54) in each of the three studies. In 1963 the mean length of stay was 6.9 days for those in this age group with hospital insurance and 5.7 days for the uninsured.

Individuals in the lower income groups use more hospital services than persons in the

higher income groups. For example, the hospital admission rate varies in 1963 from a high of 16 per 100 person-years for persons with a family income of under \$2,000 to a low of 10 for persons with a family income of \$10,000 or more. One reason for this relationship is that there are proportionately more older people in the lower income groups and older people tend to use hospitals more. Another reason is that hospitalization, especially for a family wage earner, sometimes reduces family income. However, in general, people appear to be using hospital services despite economic barriers and rising costs of care.

Hospitalized Surgery

There were five hospitalized surgical procedures performed for every 100 person-years in 1963.¹⁰ The rate did not change from 1958. The rate was six for persons with hospital surgical insurance compared to three for those without in the latest survey.¹¹ Corresponding rates in 1958 were five and four. Again, differences in population characteristics between the insured and uninsured must be considered in interpreting these results.

The relationship of surgical insurance to surgical rates is strongest where "elective" procedures are involved. Tonsillectomies are one of the most frequently performed surgical procedures and many of them are thought to be "elective" in nature. In each of the three surveys the rate for children 17 years of age or under with insurance was considerably higher than for children without insurance. In 1963 the rate for children with insurance was 24 per 100 person-years compared to a rate of 7 for uninsured children.

Dental Care

The proportion of people seeing a dentist at least once during the survey year rose from 34 per cent in 1953 to 37 per cent in 1958 and 38 per cent in 1963 (Table III).¹² Older children age 6 to 17 and young adults in the 18 to 34 age group are most likely to use dental services. The youngest and oldest age groups are least likely to see a dentist. During the 10 years covered by the studies,

Table III

Per Cent of Persons Receiving Dental Care
During Survey Year by Age and Sex,
1953, 1958, and 1963*

Age and Sex	1953	1958	1963
All Persons	34	37	38
1-5	10	12	12
6-17	44	47	47
18-34	44	45	46
35-54	39	42	43
55-64	25	29	32
65 and over	13	19	20
Male	31	34	36
Female	36	40	41

* See footnote 12.

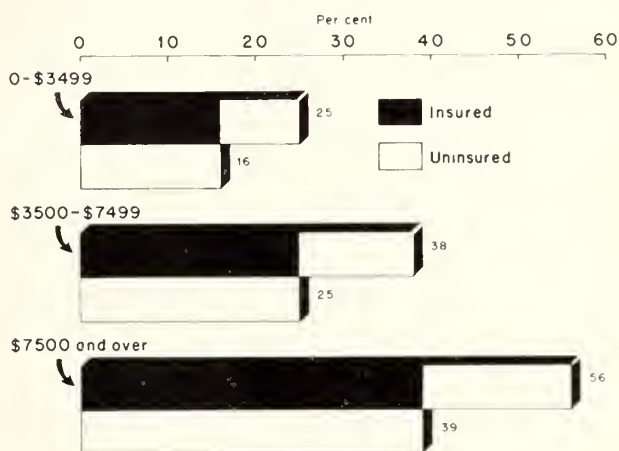
some increases in the per cent seeing a dentist took place in all age groups. The increases were greatest in the older groups and least in the younger groups. For instance, between 1953 and 1963 the increase was seven percentage points for the groups 55-64 and 65 and over compared to two percentage points for those 1-5 and 18-34 and three percentage points for those 6-17.

Use of dental care appears to be more closely related to family income than is any other major type of health care. The percentage of persons seeing a dentist rises consistently with increasing family income from a low of 16 per cent for those with incomes of less than \$2,000 to 60 per cent for those having family incomes of \$12,500 or more in 1963. The fact that older people, who are less likely to see a dentist, tend to have lower incomes can account for only part of this relationship. In addition, dental care is defined as less "necessary" and more "elective" than is physician or hospital care. Higher income people seem more likely to purchase such "elective" care than lower income persons. Also the relationship between income and use is not obscured by the presence of third party purchasers of services for dental care as is true for physician and hospital care.

Even though dental care is generally not covered by health insurance, insured people are more likely to see a dentist than are the uninsured for each income level (Chart III). For example, among persons with a family

Chart III

Percentage of Persons Receiving Dental Care
by Family Income and Hospital Insurance Status,
1963*



* See footnote 12

income between \$3,500 and \$7,499, 38 per cent of those with hospital insurance saw a dentist compared to 25 per cent of those without hospital insurance. These data indicate that differences in health behavior exist between persons with health insurance and those without, for uninsured as well as insured services.

Eye Care

The proportion of persons seeing an ophthalmologist, optometrist, or optician in 1963 was 20 per cent. Table IV shows that the percentage receiving eye care increased with each age group and reached a maximum of

Table IV

Per Cent of Persons Receiving Eye Care
During Survey Year by Age and Sex,
1953, 1958, and 1963*

Age and Sex	1953	1958	1963
All Persons	14	13	20
0-5	1	1	3
6-17	11	12	17
18-34	14	12	18
35-54	20	18	24
55-64	23	19	30
65 and over	18	17	28
Male	13	13	18
Female	16	14	21

* See footnote 12.

(Continued on Page 447)

Behind continued high blood pressure readings lies the possibility of organic damage¹⁻¹³

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.¹

There is one aspect of hypertension, however, that seems, in many cases, predictable. "... when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."¹⁴ All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.



"Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."⁴

"[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."¹⁰

"... most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."¹

"In short, treatment is indicated."¹

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.⁷

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.¹⁴ Essential hypertension is an indication not only for treatment, but for early and adequate treatment of the patient in question.

Reduce the blood pressure with Rautrax-N

Rautrax-N combines the antihypertensive-tranquilizing action of whole root rauwolfia with the antihypertensive-diuretic action of bendroflumethiazide in one convenient medication. The two drugs complement each other

so that smaller doses of both are possible.

Rauwolfia combined with bendroflumethiazide is particularly effective in long-term therapy,¹⁵⁻¹⁷ since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

References: 1. Page, I. H., and Dustan, H. P.: The Usefulness of Drugs in the Treatment of Hypertension, in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: *Controversy in Internal Medicine*, Philadelphia, W. B. Saunders Co., 1966, p. 95. 2. Hollander, W.: The Evaluation of Antihypertensive Therapy of Essential Hypertension in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: *Controversy in Internal Medicine*, Philadelphia, W. B. Saunders Co., 1966, p. 97. 3. Nickerson, M.: Antihypertensive Agents and the Drug Therapy of Hypertension, in Goodman, L. S., and Gilman, A.: *The Pharmacological Basis of Therapeutics*, ed. 3, New York, The Macmillan Co., 1965, p. 727. 4. Berkson, D. M.: *Indust. Med. & Surg.* 32:371, 1963. 5. Cohen, B. M.: *M. Times* 91:645, 1963. 6. Lee, R. E., et al.: *Am. J. Cardiol.* 11:738, 1963. 7. Moyer, J. H.: *Am. J. Cardiol.* 9:821, 1962. 8. Moser, M.: *New York J. Med.* 62:1177, 1962. 9. Wood, J. E., and Battey, L. L.: *Am. J. Cardiol.* 9:675, 1962. 10. Moyer, J. H., and Heider, C.: *Am. J. Cardiol.* 9:920, 1962. 11. Moser, M., and Macaulay, A. I.: *New York State J. Med.* 60:2679, 1960. 12. Judson, W. E.: *Nebraska M. J.* 44:305, 1959. 13. Hodge, J. V.; McQueen, E. G., and Smirk, H.: *Brit. M. J.* 1:5218, 1961. 14. Moyer, J. H., and Brest, A. N.: *Hypertension Recent Advances*, Philadelphia, Lea & Febiger, 1961, p. 633. 15. Berry, R. L., and Bray, H. P.: *J. Am. Geriatrics Soc.* 10:516, 1962. 16. Reid, W. J.: *J. Am. Geriatrics Soc.* 13:365, 1965. 17. Feldman, L. H.: *North Carolina M. J.* 23:248, 1962.

Contraindications: Severe renal impairment or previous hypersensitivity. **Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

Precautions and Side Effects: The dose of ganglionic blocking agents, veratrum or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Caution is indicated in patients with depression, suicidal tendencies, peptic ulcer; electrolyte disturbances are possible in cirrhotic or digitalized patients. Marked hypotension during surgery is possible; consider discontinuing two weeks prior to elective surgery and observe patients closely during emergency surgery. Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression, diarrhea, weight gain, edema, drowsiness may occur. Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients, and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, rashes may occur.

Dosage and Supply: Initial dosage, 1 to 4 tablets daily, preferably at mealtime. Maintenance, 1 or 2 tablets daily. Rautrax-N is supplied as capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin®), 4 mg. bendroflumethiazide (Naturetin®), 400 mg. potassium chloride. Also available: Rautrax-N Modified — capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin), 2 mg. bendroflumethiazide (Naturetin), 400 mg. potassium chloride. Both potencies available in bottles of 100. For full information, see Product Brief.

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Squibb Rauwolfia Serpentina Whole Root (50 mg.) with Bendroflumethiazide (4 mg.) and Potassium Chloride (400 mg.)

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NATIONAL SURVEY SHOWS

(Continued from Page 445)

30 per cent for those 55-64 in 1963. This peak is followed by a slight decline for persons 65 and over. Females are more likely to receive eye care in a given year than are males.

There was little change in the over-all proportion receiving eye care between 1953 and 1958 (Table IV). In the next five years there was an increase of 7 percentage points. The increase was especially pronounced for those 55 and over. For these older people the proportion receiving eye care increased by 11 percentage points between 1958 and 1963.

References

1. This bulletin is the fourth in a series reporting findings from three surveys conducted over a ten-year period by Health Information Foundation and National Opinion Research Center, University of Chicago. In the most recent survey members of 2,367 families were interviewed in their homes in early 1964 concerning their use of health services, expenditures for these services, and participation in voluntary health insurance for the calendar year 1963. Additional information regarding these families was collected from hospitals and providers of voluntary health insurance. This survey was designed to parallel earlier studies conducted in 1953 and 1958. Detailed comparisons over a ten-year period are thus possible.

The members of the families in each of the studies constituted an area probability sample of the civilian, noninstitutionalized population. Since the data from these studies are based on a sample of the population, they are subject to sampling variability. Particular care should be exercised in their interpretation where small differences or a small number of observations are involved.

Previous issues of this bulletin based on the surveys were: "Trends in Personal Health Spending," Vol. XIV, No. 5, 1965; "Trends in Voluntary Health Insurance," Vol. XV, No. 1, 1966; "Maternity Care and Costs: A Ten-Year Trend," Vol. XV, No. 2, 1966. A full report on the comparisons of the first two studies was published as Odin W. Anderson, Patricia Collette, and Jacob J. Feldman, *Changes in Family Medical Care and Voluntary Health Insurance*, Cambridge, Massachusetts: Harvard University Press, 1963. A full report including the current survey will be published at a later date. This current survey is financed by the U. S. Public Health Service, Division of Hospital and Medical Facilities, Research Grant No. HM 00298-01.

2. Visits by either a doctor or osteopath or his nurse or technician including: (1) Visits at the office of a physician in private practice; (2) visits at a hospital outpatient, industrial, school, "well baby," or public health department clinic; (3) visits made by a physician to the patient's own home; and (4) visits made to a hospital inpatient by patient's own physician or hospital staff physician. Includes only individuals who were in the sample population for the entire 12-month survey year.

3. Comparable data on physician visits are not available from the 1953 study.

4. Includes office, clinic, and home visits but excludes hospital inpatient visits as defined in footnote 2.

5. Admission to hospitals classified by the American Hospital Association as general or special long term, mental and allied or tuberculosis hospitals are excluded from this tabulation. Only admissions to hospitals classified as general or special short term by the AHA, and hospitals not listed by the AHA but not clearly long term, are included. Only admissions which began during the survey year are included. The bases for these rates have been adjusted for persons who were in the sample population only a fraction of the survey year—thus the terminology "person-year."

6. Only short term hospital days falling within the twelve-month survey year are included here. Mean number of days is computed by dividing the total number of days of hospitalization by the total number of admissions beginning within the survey year.

7. Only short term hospital days falling within the twelve-month survey year are included.

8. For a discussion of the relationships between insurance coverage and population characteristics see a previous issue of this bulletin. "Trends in Voluntary Health Insurance," Vol. XV, No. 1, January-February, 1966.

9. An admission is classified in this study as insured if the patient had hospital insurance in effect at the time of admission regardless of whether or not hospital insurance benefits were received.

10. A surgical procedure is defined here as any cutting procedure (including Caesarean deliveries, but not normal deliveries) or setting of a dislocation or fracture. Endoscopic procedures, suturing of wounds, and circumcision of newborn infants, often classified as surgical procedures, are not so classified in this study.

11. A hospitalized surgical procedure was defined as insured if hospital surgical insurance was in effect at the time the procedure was performed regardless of whether or not surgical insurance benefits were received.

12. Includes only individuals who were in the sample population for the entire 12-month survey year.



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BRISTOL THERAPEUTIC SUMMARY. For complete information, consult Official Package Circular. **Indications:** Upper respiratory infections due to sensitive bacteria where concomitant symptomatic relief of fever, malaise and congestion is desired. **Contraindication:** A past history of hypersensitivity to one or more components. **Warnings:** Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). **Precautions:** Antihistamines may cause

drowsiness and patients should not perform tasks requiring mental alertness while taking this agent. Bacterial or mycotic superinfection may occur. Infants may develop increased intracranial pressure with bulging fontanelles. In gonorrheal therapy, serologic tests for syphilis should be performed initially and monthly for three months. **Adverse Reactions:** Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis and allergic reactions may occur. **Usual Adult Dose:** Two capsules q.i.d. Continue therapy for at least 10 days in beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

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Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on

rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

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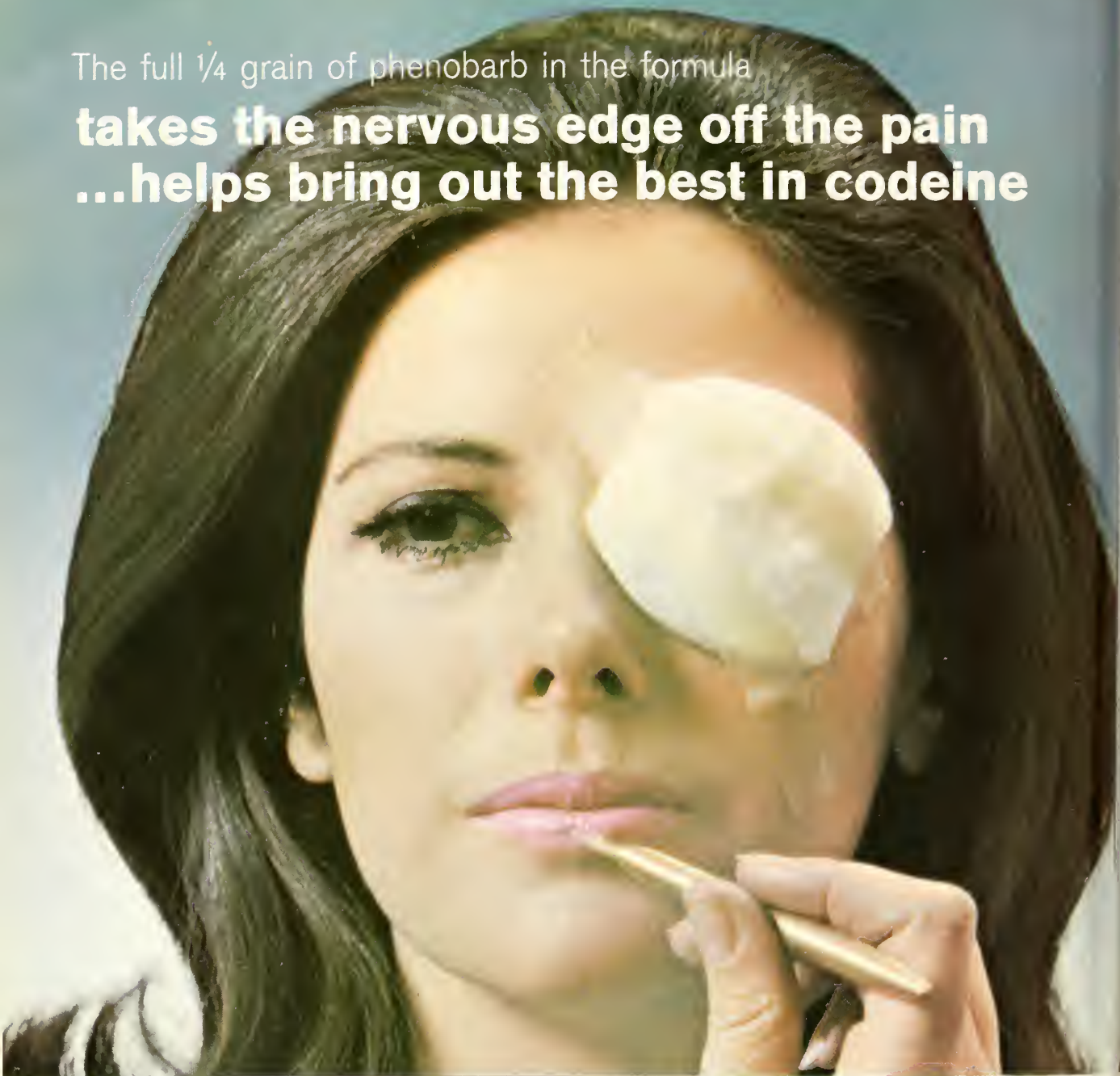
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*Siller, J. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

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Phenacetin (3 gr.) 194.0 mg.

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Codeine phosphate $\frac{1}{4}$ gr. (No. 2),

$\frac{1}{2}$ gr. (No. 3), 1 gr. (No. 4)

(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation and drowsiness have been reported.

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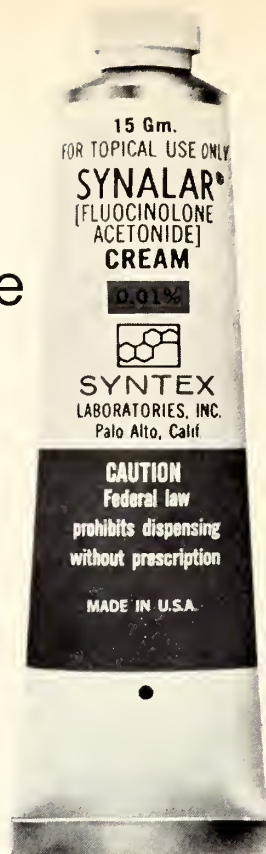
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Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** 1. *General*—Synalar Cream 0.01% is virtually nonsensitizing and nonirritating. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to

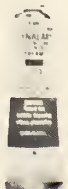
have an adverse effect on pregnancy, the safety of their use on females has not absolutely been established. Therefore, they should be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. 2. *Occlusive dressing method*—With occlusion of large areas, systemic absorption of the corticosteroid may occur, and precautions should be taken. Occasional patients may show sensitivity to a particular dressing material or adhesive. Miliaria, folliculitis, pyoderma have been seen infrequently with the use of this technique. Development of infection requires appropriate antibacterial therapy. Continuation of the occlusive dressing method. Local atrophy has been reported with protracted occlusive dressing therapy. Wound healing may be expected to occur in many psoriatic patients, but may persist for several weeks to several months in favorable cases. Patient whose psoriasis is in an active stage, with recent appearance of lesions, may not be a good candidate and may show early relapse. Plastic films may be flammable, and due care should be exercised in use. Similarly, caution should be employed when such films are used near children to avoid the possibility of accidental suffocation. **Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. **References:** 1. Cahn, M. Levy, E. J. *J. New Drugs* 1:262 (Nov.-Dec.) 1961. 2. Meenan, F. C. *Med Ass* 52:75 (Mar.) 1963. 3. Robinson, H. M., Jr., Raskin, J., and W. J. R. *Southern Med J* 56:797 (Jul.) 1963.

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Alabama Department of Public Health



More Physician Direction Achieved

By Ira L. Myers, M. D., M. P. H.

The state health department has now completed its reorganization and delineation of responsibilities by action of the State Board of Health on August 17, 1966.

Three new bureaus were created and three divisions were transferred in the most recent Board action. This brings to a total of five the new bureaus created within the state health department in the past three months.

The Division of Hospital Planning was abolished. A Bureau of Health Facilities Construction was created and is directed by Mr. Clay H. Dean, who has served as director of Hospital Planning since 1949. The new bureau will administer the Hospital and Medical Facilities Survey and Construction Programs as well as the Health Mobilization Program. It will also serve as the Mental Retardation Construction and Mental Health Center Construction authority.

Dr. Robert W. Robinson will direct activities of the new Bureau of Licensure and Certification and a Bureau of Chronic Illness and Medical Care. Dr. Robinson joined the Alabama Department of Public Health in March. During the last 15 years of his service career with the U. S. Air Force, he commanded Air Force hospitals and directed professional services in medical facilities. Dr. Robinson received his M. D. degree in 1936 from the University of Nebraska College of Medicine. He interned at the Southern Paci-

fic General Hospital in San Francisco and did post graduate medical training at Monterey County Hospital, Salinas, California. He has had experience with the Joint Commission of Accreditation of Hospitals and is board certified in preventive medicine.

The recently created Bureau of Licensure and Certification will be responsible for inspecting all types of medical facilities in Alabama and for making recommendations to the state licensure advisory board. Similar inspections and recommendations will be made to the Social Security Administration regarding all facilities indicating a desire to participate in the Federal Health Insurance Plan (Medicare).

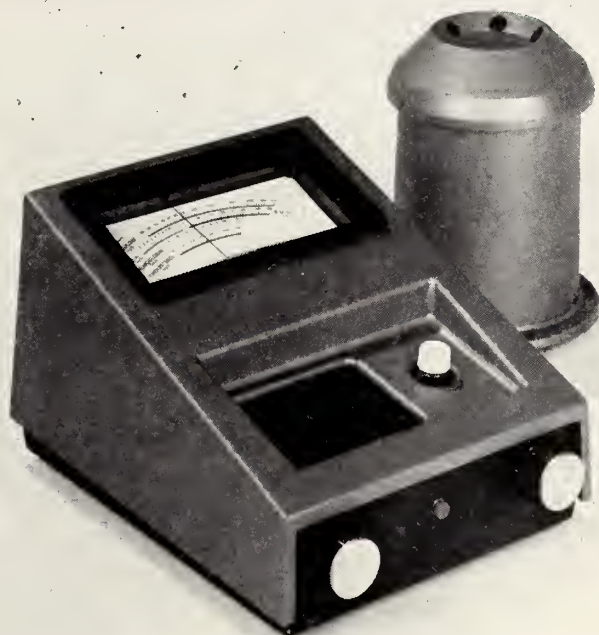
The new Bureau of Chronic Illness and Medical Care will be a two-phased program. The Chronic Illness Division, with a physician director, will be concerned with developing and stimulating chronic disease control programs to be utilized at the county health department level, for public education regarding chronic illness, case finding of chronic illness, referral of new patients to family physicians, and a limited amount of indigent chronic illness health services. Consultation services related to care of the chronically ill will be offered on request by state health department nutritionists, nurses,

(Continued on Page 460)

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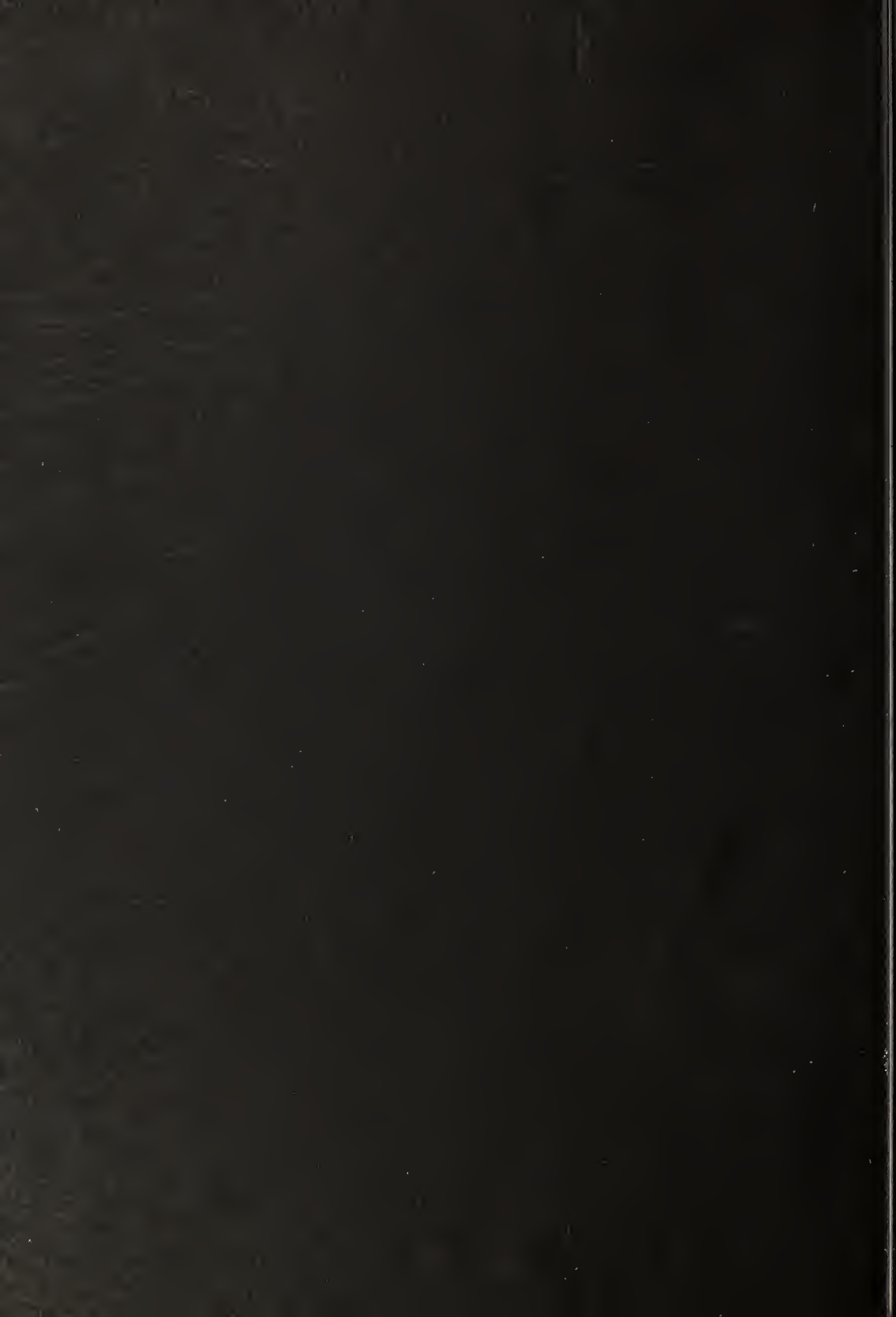
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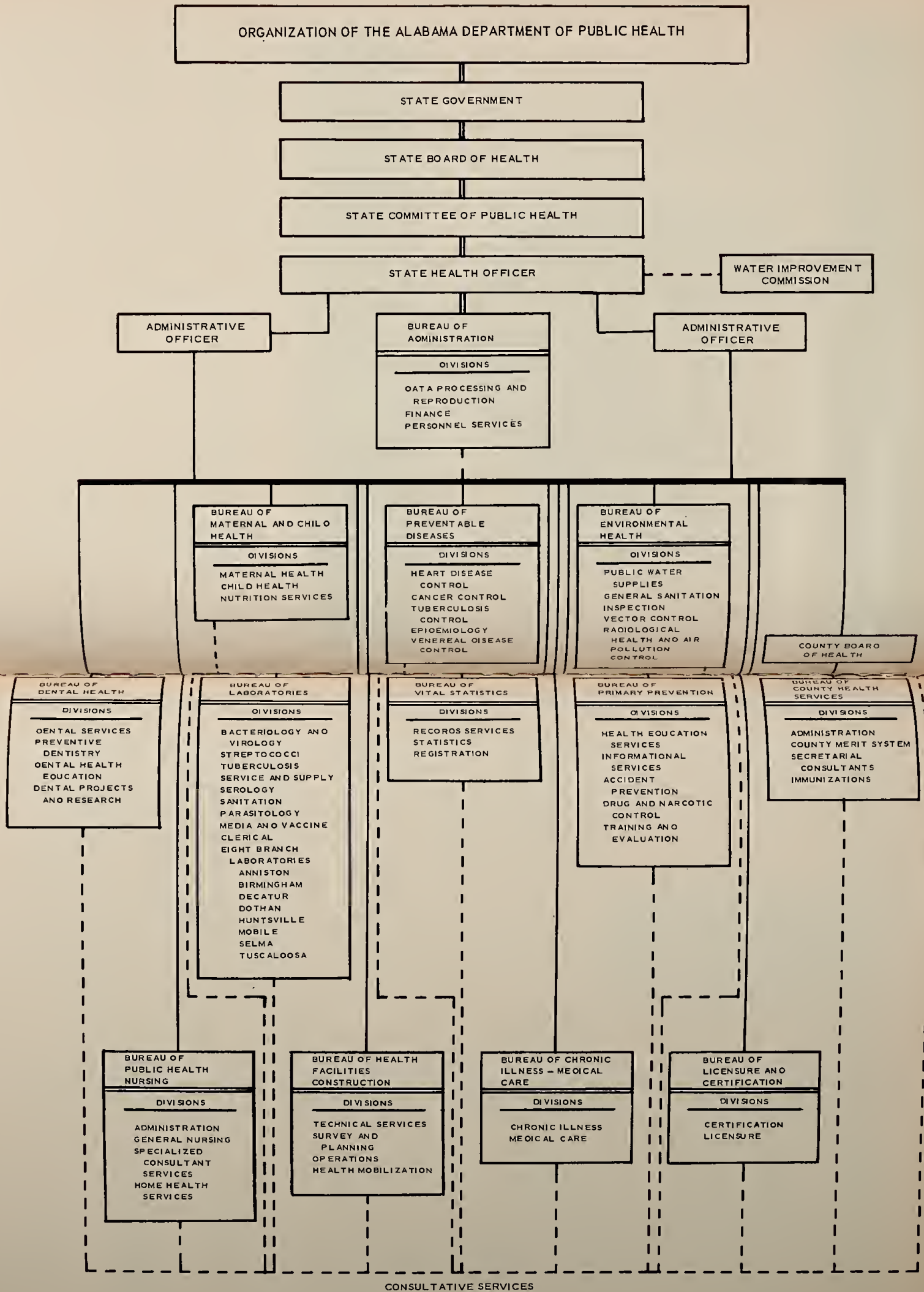
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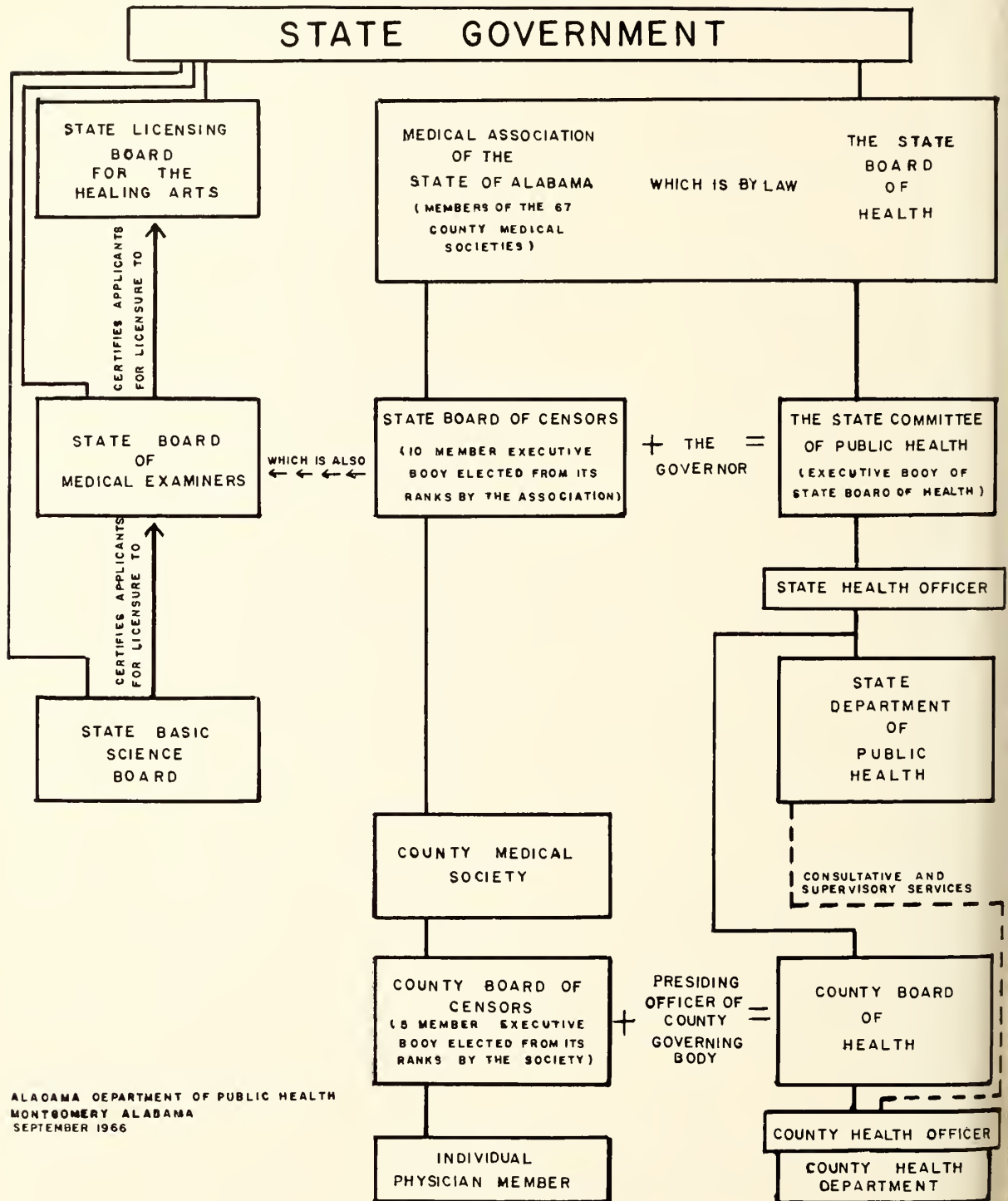
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ALABAMA DEPARTMENT OF PUBLIC HEALTH
MONTGOMERY ALABAMA
SEPTEMBER 1966



Breast-feeding and the “modern mother”

Despite a mild resurgence of interest in the importance of breast-feeding a few years ago, many women today do not choose to nurse their young. This is for a variety of reasons—social, economic, cultural and sometimes medical. In such cases the physician's task is to find the most suitable means of preventing lactation and easing the pain of breast engorgement.

The means of therapy

The value of hormone therapy for this indication is of course well established. Both androgen and estrogen are known to inhibit the production and secretion of the lactogenic hormone by the anterior pituitary. As estrogen levels decline sharply at parturition, lactogenesis is established. When androgen and estrogen are administered to the patient before the release of the lactogenic hormone lactation and breast engorgement are usually prevented.

The time of therapy

The time of administration of this combined medication is crucial; it must be given early enough to suppress the pituitary prolactin and last long enough to permit physiologic readjustment during the puerperium. Excellent results are most often seen when therapy is administered before the onset of the second stage of labor.

However, factors other than effectiveness must also be considered. The agent selected should not interfere in any way with parturition, subsequent uterine involution and the restoration of normal ovarian cyclic function. Furthermore, it should not cause rebound breast engorgement or other manifestations of hormonal imbalance.

A balanced formulation

Providing single-dose therapy for the prevention of lactation and breast engorgement, Deladumone OB is a potent androgen-estrogen combination with a prolonged action. The optimal balance of androgenic and estrogenic hormones achieved in this preparation minimizes the disadvantages inherent in single hormone therapy, such as rebound breast engorgement. Involution of the uterus and resumption of menstrual cycles are not affected.

As reported in a recent published study (Roser, D. M.: *Obstet. & Gynec.* 27:73, 1966), Deladumone OB provided good suppression of breast engorgement in 95.3% and suppression of lactation in 81.1% of 86 obstetrical patients. These results are in general agreement with those of many earlier investigations; in several studies this injectable androgen-estrogen combination proved to be superior to oral medication.

Dosage:

As a single injection of 2 cc. before the onset of the second stage of labor.

Contraindications:

Established or suspected mammary cancer or genital malignancy.

Precautions and Side Effects:

Certain patients may be unusually responsive to either estrogenic or androgenic therapy. In such individuals virilization, uterine bleeding or mastodynia may occur.


Supply:

Deladumone OB, providing 180 mg. testosterone enanthate and 8 mg. estradiol valerate per cc., is available in 2 cc. Unimatic® disposable syringes and in 2 cc. vials. Both preparations are dissolved in sesame oil, with 2% benzyl alcohol as a preservative. *Before use, consult product literature for full prescribing information.*

Deladumone® OB

Squibb Testosterone Enanthate (180 mg./cc.) and Estradiol Valerate (8 mg./cc.)

Single-dose injection for lactation inhibition

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(Continued from Page 454)

and physiotherapists to extended care facilities, home health agencies, and public health nurses.

The Division of Medical Care was transferred from the Bureau of Administration to the Bureau of Chronic Illness and Medical Care. This division will also have a physician serving as director. Personnel will administer a state program of Hospital Service for the Indigent for persons under age 65. Under contract with the Department of Pensions and Security they will supervise hospitalization and medical care for persons over age 65 who are not covered by regular Medicare under Title XVIII. This bureau will be able to offer assistance needed under Title XIX of

the new Social Security Amendments.

The Immunization Program was transferred to the Bureau of County Health Services. Raymond L. Overton will continue as director of this division. The goal of this division will be to bring 100 per cent immunity to all susceptibles. Assistance is offered physicians in providing an extensive follow-up program on all infants born in Alabama to insure that all children in our state are immunized before their first birthday.

These changes emphasize the essential requirement for public health services to be under the best professional direction possible. The addition of competent physician staff members will contribute materially to an improved quality of public health services available under the Board's direction.

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director

Current Morbidity Statistics

1966

	July	August	E. E. August
Tuberculosis	125	94	134
Syphilis	148	173	147
Gonorrhea	406	402	343
Chancroid	1	1	2
Typhoid fever	1	0	1
Undulant fever	1	0	1
Amebic dysentery	3	0	4
Scarlet fever & strep. throat	367	290	52
Diphtheria	1	0	1
Whooping cough	6	2	13
Meningitis	11	10	6
Tularemia	0	0	0
Tetanus	3	0	5
Poliomyelitis	1	0	4
Encephalitis	0	0	0
Smallpox	0	0	0
Measles	101	17	27
Chickenpox	43	20	2
Mumps	45	35	17
Infectious hepatitis	15	18	39
Typhus fever	0	0	1
Malaria	0	0	0
Cancer	686	906	739
Pellagra	1	0	0
Rheumatic fever	15	21	11
Rheumatic heart	16	19	22
Influenza	22	6	28
Pneumonia	282	135	144
Rabies—Human cases	0	0	0
Pos. animal heads	0	1	0

As reported by physicians and including deaths not reported as cases.

E. E.—The estimated expectancy represents the median incidence of the past nine years.

Mammography

Mammography is a valuable adjunct to the physical examination for early detection of cancer of the remaining breast in high-risk patients who previously have had unilateral mastectomy.

This is the conclusion of Dr. Michael M. Missakian and colleagues of Mayo Clinic, based on a study of 397 patients. In 25 cases, mammography demonstrated cancer of the remaining breast. (Mammography is a technique of radiological examination requiring neither contrast medium nor air injection.) Physical examination alone detected 15 of the tumors—nine malignant and six benign. Mammography revealed malignancy in ten cases in which it was not previously suspected.

Carcinomas detected by mammography were smaller and had fewer axillary-lymph-node metastases than did lesions that could be palpated.—*JAMA*, Mar. 29, pp. 1045-1048.

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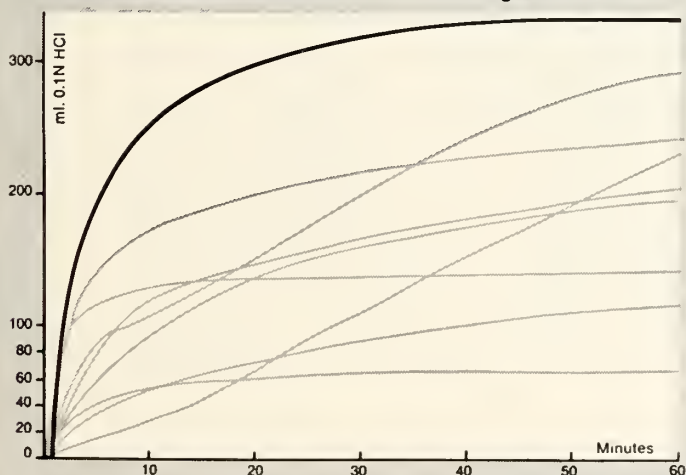
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In recent laboratory comparisons* with eight other leading antacids, new WinGel tablets not only neutralized more hydrochloric acid per active-ingredient weight, but neutralized it faster and longer than all other antacids tested.

Pleasant pink in color, WinGel is delicately mint flavored with a smooth-as-cream texture—qualities sure to please the patient on long-term therapy. New WinGel is also specially formulated to avoid constipation or diarrhea.

New WinGel neutralizes 300 times its active-ingredient weight in 0.1N hydrochloric acid — neutralizes more acid faster than other leading antacids



WinGel

Rate of 0.1N hydrochloric acid neutralization at pH 3.5 and 37° with WinGel and eight other leading antacid tablets—in vitro. Samples equaled the weight of tablet material containing 1.0 Gm. active ingredients.*

*Hinkel, E. T., Jr. (New York): Data in the files of the Department of Medical Research, Winthrop Laboratories.

Dosage: Peptic ulcer or gastritis—from 2 to 4 teaspoons of WinGel liquid or 2 to 4 tablets chewed or allowed to dissolve in the mouth every two to four hours. **Gastric hyperacidity**—2 tablets or teaspoons about ½ to one hour after meals as needed; children from 7 to 14 years of age, 1 or 2 tablets or 1 or 2 teaspoons of liquid as needed.

How Supplied: Liquid in bottles of 8 fl. oz. and 1 pint. Tablets in cellophane strips, boxes of 50 and 100. (One teaspoon of WinGel liquid is equivalent to one WinGel tablet in acid-combining capacity.) WinGel, trademark reg. U.S. Pat. Off.

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If lenses are worn on the corneas when the eyelids are closed, circulation of tears beneath the lenses stops and the corneal epithelium dies rapidly. Lenses sometimes become so adherent to the corneas that their removal may actually tear off large areas of epithelium. This results in abrasions that are painful, vulnerable to infection and potentially damaging to eyesight, reports Dr. P. Thomas Manchester.

Contact lenses can do no harm in the cul-de-sacs and it is much easier to slide them there than to remove them. If removed com-

pletely, the lenses may become contaminated or scratched, he warned.

Any person, regardless of his knowledge of anatomy, can push the lenses off the corneas and into the cul-de-sacs without damaging the eyes, whereas removal is often injurious.

The method is as follows: Two fingers, usually the thumb and forefinger, are used to apply pressure to the outside of the eyelids. To avoid contamination, pressure is applied through the lids in the region of the corneal borders. The lens then is moved up or to the side into the cul-de-sacs, where it can remain until the patient regains consciousness.

"There is no danger that the lenses will be permanently trapped in the cul-de-sacs and they may remain there for at least 24 hours," Dr. Manchester concluded.—*GP*, March, p. 111.



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Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazard-

ous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlorthalidone HCl.

Dosage — Adults: Mild to moderate psychoneurotic reactions, to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients, 1 or 2 mg/day initially, increase gradually as needed.

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IN THIS ISSUE

- Title XIX - Medicine's Greatest Challenge . . . 474*
Progress in Cancer Research and Control . . 521
William McFarland Boling 529
Management of the Rh Problem 534

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of the

Medical Association of the State of Alabama

Volume 36 • November, 1966 • No. 5

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104
Subscription Price \$5.00 Per Year
\$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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CONTENTS

President's Page	469
The Woman's Auxiliary	471
Editorial Comment	474
Title XIX—Medicine's Greatest Challenge	474
The Guard Is Changed	475
Good Only For 'Them'	475
Rabies Is Ever With Us	475
On Collecting Accounts	478
Judgment Upheld	478
Guest Editorial	490
The Real Meaning of 'Freedom'—Mabelle Segrest	490
Scope of AMA-ERF	494
U. S. Nears Milestone In Medical Education	495
Around the State	499
\$1.6 Million Grant for Needy Children Care	499
Health Careers Council "Advertising Campaign"	500
Twelve Alabama Surgeons Inducted into Fellowship	503
Franklin Medical Society Meets	503
Blitz on Syphilis in Alabama, W. H. Y. Smith, M. D., M. P. H., Montgomery	505
Scientific Section	521
Progress in Cancer Research and Control, John R. Heller, M. D., New York	521
William McFarland Boling—Physician-Teacher, Emmett B. Carmichael, M. S., Ph. D., Birmingham	529
Maternal and Child Health	534
Management of the Rh Problem, George Cassady, M. D., Paul McCain, M. D., and Betty Vaughan, M. D., Birmingham	537
Alabama Department of Public Health	565
The Physicians' Role in Abating Drug Addiction	565
Blue Shield—A Physician's Viewpoint, Charles L. Hudson, M. D., President, AMA	575
The New York Story—Medicaid Law Causes Public Furor	582
Motion Picture Offered for Recruiting Purposes	595
AMA Pushes Better Services to Upgrade Medical Care	596
Coronary Drug Study Undertaken by Emory	596
Selective Typhoid Immunization Urged	597
Guidelines for Skilled Nursing Homes Issued	600
Socio-Economic Health Care Congress	604
Southern Medical Honors Dr. J. Garber Galbraith	606
Awards Are Announced for Fertility Society	607
5,000 Physicians Expected at AMA Convention	608



Diagnosis:

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pyelonephritis?
pyelitis?
urethritis?
prostatitis?**

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Therapy:

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Urinary tract infections caused by gram-negative and some gram-positive organisms.

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As with all new drugs, blood and liver function tests are advisable during prolonged treatment. Pending further experience, like most chemotherapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or impairment of kidney function. Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid exposure to direct sunlight while receiving NegGram, and if a rash occurs, therapy should be discontinued. The dosage recommended for children should not arbitrarily be doubled unless under the supervision of a physician. Bacterial resistance may develop.

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Warning: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.

Side effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness. For full details, see the complete prescribing information.

Availability: Bottles of 100 and 1000 tablets.

Geigy



President's Page

On The Called Meeting of The College of Counsellors and House of Delegates

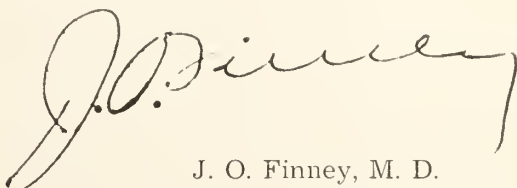
When this article appears in the November issue of the Journal, the proceedings of the called meeting of the College of Counsellors, House of Delegates and the state and county officers of the Association will be a matter of record. It is anticipated that the record will show the exercise of sound judgment on all issues considered at the meeting.

I think the members of the Association share my sense of real appreciation for the efforts of the Ad Hoc Committee of the Board of Censors in their long and arduous deliberations on the matter of administrative separation of the Blue Cross-Blue Shield Corporation. Our declared objectives were attained with a minimum of compromise. Members of the Board, serving on the committee, were Dr. Hugh Gray, Dr. John Chenault and Dr. Paul Burleson, Chairman.

Of utmost importance to every member of the Association, regardless of his chosen field in medicine, is the approaching implementation of Title XIX. This facet of Public Law 89-97 provides for the care of *ALL* in need of medical care and incapable of providing it for themselves. This will cover the medically needy in Alabama from the cradle to age 65; perhaps some beyond the age of 65. In our state, the Governor designated the Department of Pensions and Security to administer Title XIX. The Medical Association of the State of Alabama agrees that the Department of Pensions and Security should determine eligibility and take no serious issue with that department serving as, or providing for a fiscal agent by contract. The Association strongly feels that it should have the sole responsibility for *ALL* the medical aspects of the Title XIX program in Alabama. You were presented a proposed enabling Act at the meeting. Let me reiterate that as op-

posed to Title XVIII, Section 1802, Title XIX does not provide specifically for "free choice of a physician." Further, Section 1801 of Title XVIII states, "Nothing in this title shall be construed to authorize any Federal officer or employee to exercise any supervision or control over the practice of medicine or the manner in which medical services are provided,—etc." No such provision is written into Title XIX and for our protection must be incorporated into the State Enabling Act. It should be readily apparent that we must mobilize all our resources for legislative action in 1967, if we are to gain full control of medical affairs as will be provided under Title XIX in Alabama. It appears, now, that every member and every county society will be called upon to aid the Association in this just cause.

The need for an increase in dues, apparently a common malady among all medical organizations in these perilous times, has been well presented by the Secretary-Treasurer, Dr. William L. Smith. As this is being written, it is hoped that the College of Counsellors and the House of Delegates will follow the example set by the Board of Trustees and the Board of Censors and give unanimous approval to the request for funding necessary to adequately operate the Association. In Pat Patterson and Bob Ingram, we now have the best leadership we have ever had in the Central Office in Montgomery. Great leadership demands realistic support.



J. O. Finney, M. D.
President

WHO SHALL LIVE, WHO SHALL DIE?

Who shall live and who shall die? This is the question that hospitals and society will have to answer when the artificial heart becomes more than an experiment.

Although it may be years before the use of an artificial heart becomes nonexperimental, according to *The Modern Hospital* magazine, planning must start now to prepare for the moral implications that this life-saving device will bring about.

As demand will surely exceed supply in a program of heart replacement, the moral problem will be on what basis will heart candidates be selected, says the McGraw-Hill publication.

Who Will Receive Treatment?

Medical criteria will identify a sample of candidates, but will not clarify the questions of which individuals should receive treatment.

In other words, how does one select between an artist and a businessman, or between a well-established scientist and one of great but untested potential? Should the criterion be the dependence of others on the candidate? Should this be determined by the number of children or on the relationship between parent and child?

The issue of civil rights also enters the problem of selection. If candidates are selected because of their value to society or ability to pay, can this be regarded as discrimination against other categories of the population?

Another problem would involve women. They would, of course, be eligible for the implanted heart. If it is medically impossible or highly undesirable for a heart implantee to become pregnant, does this mean that women of childbearing age would be denied a substitute heart, or require sterilization or abortion as a precondition?

Related to selection is the problem of informing candidates of the decision. What are the consequences of telling a patient with a serious cardiac condition that he has been denied the last resort of an artificial heart?

There are potential problems with the selected candidate, too. The implantation of an artificial heart involves more than a single operation. Instead, it requires a series of scheduled, surgical procedures that would be carried out at regular intervals throughout a patient's life.

The essential issue in this case would be to prepare the patient for life with his substitute heart and to provide the necessary support after surgery so that consent for each surgical procedure in a lifetime schedule will be freely given. This will require extensive preoperative social and psychological preparation of the candidate and his family.

Extra 25 Years of Life

Rehabilitation will be especially important because the ideal artificial heart candidate will be in his 40s and 50s and may be given as long as a quarter of a century to live.

Without an extensive continuing program of social and psychological support, it is not unreasonable to suggest that there should be a likelihood of an increase in the rates of "active" and "passive" suicide.

In general, it can be said that the advent of the artificial heart should quicken the pace with which society is examining the social and moral implications of the extension of life through surgical and medical means, concludes *The Modern Hospital* article.

* * *

Seeing all those new cars in the road makes you realize that you certainly have to give the American people a lot of credit.

The Woman's Auxiliary

As summer's departure becomes evident, medical Auxiliary members in Alabama re-dedicate themselves to community health service. In September over 60 representatives from 36 organized counties met in Montgomery for a state fall workshop, with the theme "What does the Auxiliary do?"

Attending members were rewarded with informative talks, skits and future plans from officers and committee chairmen. A wonderful opportunity to broaden our horizons was gained from our guest speakers: Mrs. Ellen Gormley, Chairman, Alabama Hospital, Auxiliaries; Mrs. Lillian G. Meade, Executive Vice President of American Cancer Society, Alabama Division, Inc.; Mrs. Emily Holmes, Woman's Representative to Alabama Civil Defense Department; and Dr. Ira L. Myers, State Health Officer.

October attendance of national fall conference by Mrs. W. G. Thuss, President, Southern Medical Auxiliary; Mrs. John Chenault, Historian, Woman's Auxiliary to the American Medical Association; Mrs. Ira B. Patton, President and Mrs. James C. Guin, President Elect, Woman's Auxiliary to the Medical Association of the State of Alabama; has given each of us a re-affirmation of the long time purpose of the Auxiliary and the new program emphasis for the year.

At one of the luncheon meetings a most impressive delivery—Project Viet Nam—was given by his excellency Vu Van Thai, Ambassador to Viet Nam. Dr. Norman Hoover, an AMA Volunteer physician to Viet Nam, gave us a description of his duties, and asked for our encouragement in obtaining physicians for Viet Nam.

November 8th, being election day, there is still much for our members to do in the field of legislation. Remember GOOD LEGISLATORS result in GOOD LAWS! Since we have more leisure time than our husbands,



Mrs. Ira B. Patton

learn political skills, learn about government, learn to elect representatives on all levels of government of your choice. OFFER to WORK, since hard work seldom actually kills anyone, but it scares a lot of folks to death.

Politicians listen to the ones that have helped them win an election. Pressure groups in politics are necessary and they definitely influence public policy. Drive a harder bargain for developing major attitudes.

—Mrs. Ira B. Patton

What some people don't know about driving would fill a hospital.

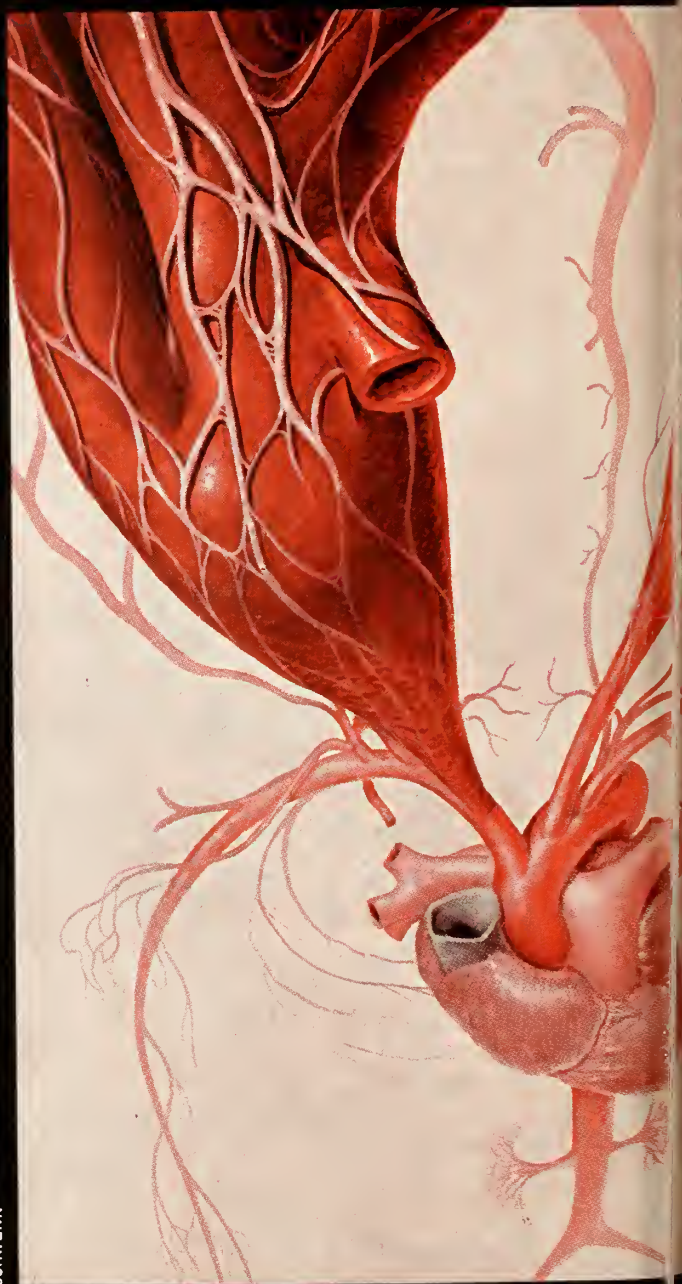
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References: 1. Editorial: JAMA 191:592 (Feb. 15) 1965. 2. Meilman, E., in Moyer, J.H.: Hypertension, Philadelphia, W.B. Saunders Company, 1959, p. 395.

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Indications: Essential hypertension.

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Contraindications: Salutensin is contraindicated in severe depression.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss, which may cause digitalis intoxication, responds to potassium-rich foods, potassium chloride or, if necessary, stopping therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy two weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution with patients with peptic ulcers or renal insufficiency (if severe, Salutensin is contraindicated).

Side Effects: *Hydroflumethiazide:* Purpura plus or minus thrombocytopenia, hyperuricemia, leukopenia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet *b.i.d.*

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TITLE XIX—MEDICINE'S GREATEST CHALLENGE

This Association—indeed, this whole civilization—is faced with a serious challenge for survival. Insidious forces are at work to destroy private initiative and to substitute for it a smothering system of government by executive-judicial fiat. There are few bulwarks remaining to stem this avalanche.

When this Association was reorganized, almost 80 years ago, its basic purpose was to unite physicians of Alabama under a common bond. It was believed then, and rightly so, that by bringing the members together at frequent intervals, a united front dedicated to the advancement of Medicine could be effectuated.

The results of 80 years attest to the rightness of the sponsors' theory. Alabama has the most enviable public health program of all the 50 States. Neither selfish interests nor partisan politics dominate it.

This Association serves the interests of the public health first; it serves the individual interests of the physician secondarily, if at all. It can be proudly stated that in the dozens of legislative proposals introduced in the past two years, many of them vigorously supported or opposed by this Association, not one would have benefited the practice of Medicine from a pecuniary or selfish standpoint.

Thus was this Association fulfilling its sworn obligation—to help the sick and the poor and the afflicted, to conserve the public health without regard to its own convenience or enrichment.

The people became aware of Medicine's unselfish devotion to the public welfare and bestowed upon it a dignity and respect enjoyed by no other profession.

But then came the Great Depression of the 30's, followed by a succession of social experiments which has all but destroyed free enterprise and individual initiative in this country and throughout the world. In their stead are government-sponsored programs, introduced under the guise of benefits to the indigent but, in reality, political artifices designed to bribe, buy, or bully the votes of the multitudes.

Unscrupulous labor leaders, with no restraint upon them on the expenditure of Union funds, stacked the Congress and State Legislatures with lackeys subservient to their demands. Such an unholy alliance has placed this nation in the contradictory position of enjoying maximum employment at maximum wages, yet an increasing flow of largess to a population growing ever more dependent upon the government handout.

These are the factors which must be considered early next year when Alabama attempts to implement Title XIX—a so-called womb-to-tomb health care program for the elderly, the blind, the crippled, the unwed, the dependent, the poor, and some other categories.

Since this State is rated among those with the lowest per capita income—and therefore entitled to the highest Federal matching ratio—it is safe to assume that a larger percentage of the practice of Medicine will be paid for from Federal and State treasuries.

It is a demonstrated maxim that the government controls that which it supports. Education leaders learned this the hard way. Now it is Medicine's turn to either knuckle under or fight to the last ditch.

THE GUARD IS CHANGED

There has been something akin to a changing of the guard at the Central Office of the Medical Association of the State of Alabama within the past month. Upon the shoulders of this writer has fallen the awesome responsibility for developing and maintaining a program of service to the 2,300-odd physicians of Alabama whose dues permit this organization to exist.

It is with deep humility and a profound sense of gratitude to those who have stood so staunchly by my side in recent years that I enter into my new and expanded duties. To those leaders with whom I have been so closely associated in the work of the State Association, the County Societies, the Specialty Groups, and to the individual members throughout Alabama, I hereby pledge anew my complete loyalty to the high principles of the medical profession and my total strength and energies to its continued advancement.

—LPP

GOOD ONLY FOR 'THEM'

Somebody once said, we are not sure who, that sauce agreeable to the goose would likewise be agreeable to the gander. Unfortunately, that old saying doesn't apply in the Great Society.

For proof, we refer you to recent recommendations made by the Research and Policy Committee of the Committee for Economic Development (CED). Recommended was a program to help the world's developing nations help themselves.

Here are a few of the recommendations: Increase rate of economic growth by removing obstacles that discourage private initiative; stimulate agricultural activity, and finally, develop strong anti-inflationary fiscal and monetary policies.

These are thoroughly sensible recommendations. We would hope that these develop-

ing nations, whoever and wherever they might be, will follow them to the letter.

But a far more fervent hope would be that the architects of the Great Society might likewise heed the same recommendations. The confounding irony of this is that while we tell other countries to remove obstacles which discourage private initiative, our own government is on a course which seems destined to wipe out free enterprise; while we tell other countries to stimulate agricultural development, our own farm program pays farmers not to farm; and while we tell people across the seas to adopt strong fiscal policies, this nation has embarked upon one of the most reckless spending programs in the history of the world.

The only fault with the CED committee plan is that it should be addressed to LBJ, c/o The White House, and not abroad. If there ever was a misguided missile, this is one.

RABIES IS EVER WITH US

It has been reported by the New York State Interdepartmental Rabies Committee that during 1965, 31 counties reported confirmed rabies cases. Thus, it is apparent that rabies is present in at least half of the counties in the State.

The following steps are strongly urged for persons bitten by any wild animal:

1. Cleanse the wound repeatedly with soap and water.
2. See a physician as soon as possible.

The committee noted that even an animal that appears normal could be rabies infected and transmit the disease. Therefore, any needless contact with live wild animals should be avoided.

Under a National Institutes of Health grant, jointly administered by the New York State College of Agriculture and the New York State Conservation Department, research is

(Continued on Page 478)

now...introducing a new high-strength dosage for

SIGNEMYCIN

A 'MAXIMUM SECURITY' ANTIBIOTIC*

- * **THE BROAD RANGE DEPENDABILITY OF TETRACYCLINE**
long established as the broad-spectrum agent of first choice in a wide variety of infections
- * **WITH THE ADDED SECURITY OF MEDIUM-SPECTRUM REINFORCEMENT**
triacteyloleandomycin is highly active against the common 'coccal' pathogens, including certain strains of staphylococci resistant to penicillin and tetracycline
- * **ESPECIALLY VALUABLE IN U.R.I.**
provides decisive therapy in acute respiratory infections and other conditions in which staphylococci, streptococci or mixed flora are frequently encountered
- * **NOW AVAILABLE IN NEW STRENGTH FOR NEW CONVENIENCE AND ECONOMY**
Signemycin 375 — high-potency capsules for simpler administration, greater patient economy

Y CIN[®] 375

(tetracycline 250 mg.
triacytyleandomycin 125 mg.)

Indications: Indicated in the therapy of acute severe infections caused by susceptible organisms and primarily by those more sensitive to the combination than to either component alone. In any infection in which the patient cannot be expected to respond to a single antibiotic, the combination is recommended. Signemycin should not be used where a bacteriologically more effective or less toxic antibiotic is available. *Triacytyleandomycin, a constituent of triacytyleandomycin, has been associated with deleterious changes in liver function.* See precautions and adverse reactions.

Contraindications: Contraindicated in individuals who have hypersensitivity to any of its components. Not recommended for prophylaxis or in the management of infectious diseases which may require more than 10 days of continuous therapy. If clinical judgement dictates therapy for longer periods, serial monitoring of liver function is recommended. Not recommended for subjects who have shown abnormal liver function tests, or hepatotoxic reactions to tetracycline or triacytyleandomycin.

Precautions and Adverse Reactions: *Triacytyleandomycin, administered to adults in daily oral doses of 1.0 gm. for 10 to 14 days, may produce hepatic dysfunction and jaundice. Adults requiring 3 gm. of Signemycin initially should be observed carefully and the dosage should be adjusted as promptly as possible to the usual recommended range of 1.0 to 2.0 gm. per day. Present clinical experience indicates that the observed changes in liver*

function are reversible after discontinuation of the drug.

Use with caution in lower than usual doses in cases with renal impairment to avoid accumulation of tetracycline and possible liver toxicity. If therapy is prolonged under such circumstances, tetracycline serum levels may be advisable. In long term therapy or with intensive treatment or in known or suspected renal dysfunction, periodic laboratory evaluation of the hematopoietic, renal and hepatic systems should be done. Formation of an apparently harmless calcium complex with tetracycline in any bone forming tissue may occur. Use of tetracycline during tooth development (3rd trimester of pregnancy, infancy and early childhood) may cause discoloration of the teeth. Reversible increased intracranial pressure due to an unknown mechanism has been observed occasionally in infants receiving tetracycline. Glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and definite allergic reactions occur rarely. Severe anaphylactoid reactions have been reported as due to triacytyleandomycin. Photosensitivity and photoallergic reactions (due to the tetracycline) occur rarely. Medication should be discontinued when evidence of significant adverse side effects or reaction is present. Patients should be carefully observed for evidence of overgrowth of nonsusceptible organisms including fungi, which occurs occasionally, and which indicates this drug should be discontinued and appropriate therapy instituted. Steps should be taken to avoid masking syphilis when treating gonorrhea.



J. B. ROERIG AND COMPANY
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-being[®]
New York, N.Y. 10017

RABIES IS EVER WITH US

(Continued from Page 475)

being conducted to determine a new technic for controlling wildlife rabies. This work centers on efforts to reduce wildlife rabies vectors by inhibiting reproduction. It is hoped that this technic, if successful, can ultimately be applied in areas where an overabundance of skunks and foxes make a rabies outbreak likely.

The committee stresses that all persons, especially children, should avoid unnecessary contact with any wild animals. The many young animals appearing on nature's summer scene could be much more dangerous than their normal appearance—they could have rabies.

Walk carefully and stay your distance!

ON COLLECTING ACCOUNTS

Do you as a doctor have trouble collecting your accounts receivable? If so, take what comfort you can from the knowledge that in your misery you are not alone. You have plenty of company.

An extensive survey on the subject by the National Federation of Independent Business, Inc., shows that most businessmen are having similar problems, and especially among those who handle their own accounts receivable. Substantially more success was reported by those who assign their accounts receivable to a collection agency.

Nationally, the survey shows that only 35 per cent of those polled handled their own collections. Of this group no less than 47% reported they had difficulties in making collections. Among the 65% who assign their accounts receivable, only 27% reported any collection problems.

The survey showed that independent businessmen in Alabama reported more difficulties than the national average in both categories. Of those who handle their own collections 50% reported problems, while 38% of those who assign their collections also reported difficulties.

JUDGMENT UPHELD

Of vital interest to the many members of the medical profession who have long been fighting charlatanism in all of its forms, is the recent decision of the Supreme Court of the United States. The Court reaffirmed a ruling of the United States District Court in New Orleans that Louisiana can properly refuse to license chiropractors unless they meet the same educational requirements demanded of physicians.

One particularly interesting point brought out in the Court decision is the fact that the laws of the State of Louisiana do not prohibit the practice of chiropractic. The Court stated, "The question here is: May Louisiana require a chiropractor to obtain what is in effect a medical education from an approved medical school before he may practice his profession in the state?" Obviously the Court answered in the affirmative when it further stated, "—since chiropractic claims to be a complete and independent healing art capable of curing almost all kinds of disease, the Legislature may have felt that the requirement of a foundation in materia medica and surgery even for chiropractors, would be a protection to the public."

The litigation which led up to the final decision of the Supreme Court dragged on for some seven years. It demanded countless hours of work of the members of the Louisiana State Board of Medical Examiners and the State Medical Society. Furthermore the legal expenses were formidable. But most important was the fact that the hardy and determined members of the medical profession in Louisiana, by their refusal to be browbeaten by the chiropractors, not only steadfastly fought for their principles but also for the welfare of the citizens of their state. It is only regrettable that similar victories were impossible in other states.

It used to be that a fool and his money were soon parted, but now it happens to everybody.



And now . . . for all you cold sufferers who've been looking for a cure-all.

You can't cure a cold. We can't cure a cold. You can't cure a cold. But what you can do is relieve the symptoms, making your patient comfortable and the cold bearable. For a patient suffering from head cold congestion, for instance, you can breathe easier when you prescribe Novahistine LP. Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiological mechanisms which prevent infection of the respiratory tract. Two tablets in the morning and two in the evening will provide around-the-clock relief by helping to keep congested passages clear, thus enabling your cold patient to enjoy normal and free breathing.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Tell patients who operate machinery or motor vehicles that drowsiness may result.

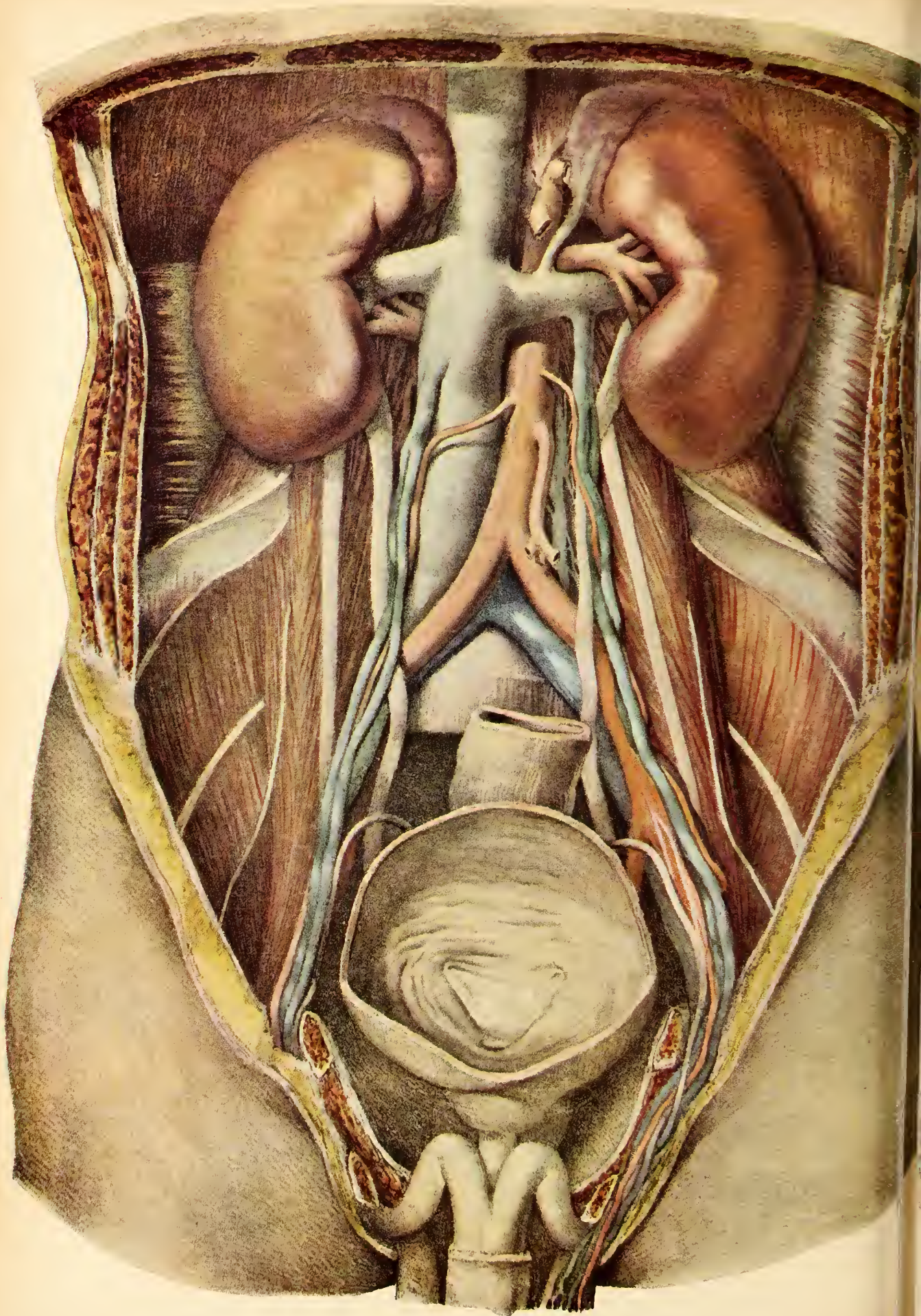
Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis



NOVAHISTINE[®] LP

For relief of nasal congestion.



Wide-range bactericidal action for genitourinary infections

NEW OMNIPEN[®] (AMPICILLIN) WYETH

A penicillin that exhibits effectiveness within the gram-positive spectrum of penicillin G* and the gram-negative spectrum of chloramphenicol and the tetracyclines.*

Active at foci of infections—kidney, ureter, bladder or urethra.

Effective against many gram-negative and gram-positive pathogens—thus may be valuable not only in genitourinary but also in common respiratory and gastrointestinal infections.

Normally produces high and persistent levels in blood and high concentrations in bile and urine.

Significant inherent stability.

**Exclusive of penicillinase-producing bacteria.*

Indications: Urinary tract infections, especially those caused by *E. coli*, *Proteus mirabilis*, and *Streptococcus faecalis* and *iridans*; respiratory infections caused by *H. influenzae*, pneumococci, streptococci, and nonpenicillinase-producing staphylococci; and gastrointestinal infections caused by *Shigella* and *Salmonella*, including *Sal. typhosa*.



Contraindications: Hypersensitivity to penicillin; infections due to penicillinase-producing staphylococci and other penicillinase-producing bacteria.

Precautions: If allergic reaction occurs, discontinue ampicillin and administer epinephrine, corticosteroids, antihistamines and/or pressor amines as indicated. Transient moderate

elevation of SGOT values of undetermined significance was noted in a few infants. Liver and kidney function as well as hematopoietic tests are advisable during therapy, particularly in infants. As with other antibiotics, precautions should be taken against gastrointestinal superinfection. Safety for use in pregnancy has not been established.

Adverse Reactions: Occasional mild side effects as urticaria, skin rash, pruritus, diarrhea, nausea and vomiting. There have been no reports of blood dyscrasias, liver or kidney damage. Anaphylaxis has been reported.

Composition: Capsules, 250 mg.
**American Hospital Formulary
Service Category No. 8:12.16.**

Wyeth Laboratories Philadelphia, Pa.



For he's a jolly good fellow



But what does he think?



Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.

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DEXTRO-AMPHETAMINE SULFATE (15 mg.) SUSTAINED RELEASE CAPSULES
WITH MEPROBAMATE (300 mg.)

**to help establish
a new dietary pattern**

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncrotic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies. **Side Effects:** Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncrotic reactions: oculopopular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), onophyloxia, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.



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**When
thiazide
or
reserpine
alone
won't
keep**

**BLOOD
PRESSURE
SURE
GOES
DOWN**

Establish and maintain early, more decisive control of blood pressure

DIUTENSEN®-R

Cryptenamine 1.0 mg.* Methyclothiazide 2.5 mg. Reserpine 0.1 mg.

When blood pressure won't stay down despite initial therapy — when complaints of headache, fatigue or dizziness are often voiced — it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine *plus* cryptenamine — a rational, comprehensive therapy to help establish and maintain early, more decisive control of blood pressure.

The cryptenamine in DIUTENSEN-R helps improve normal vasodilating reflexes while the thiazide and reserpine components maintain vasorelaxant, sedative, and saluretic benefits. Cryptenamine lowers pressoreceptor reflex thresholds (which may be abnormally high in hypertension) — “resets” pressoreceptors to function at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

“...quite apart from the problem of vascular damage, there arises a possibility of virtual ‘cure’ or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive.”

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice* 1966-67, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals.

However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars. **Side effects and precautions:** The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout symptoms and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon. DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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**How long will
it take her
to recover from
her hip fracture
if she just
doesn't care?**



Does she really care?
Is she alert, encouraged,
positive and optimistic
without getting completely
ill soon?
Or has she given in to
the demoralizing impact
of confinement, disability
and dependency?
When functional fatigue
complicates convalescence,
Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that can often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic[®]

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

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Norinyl[®] tablets

(norethindrone 2 mg. ♂ mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

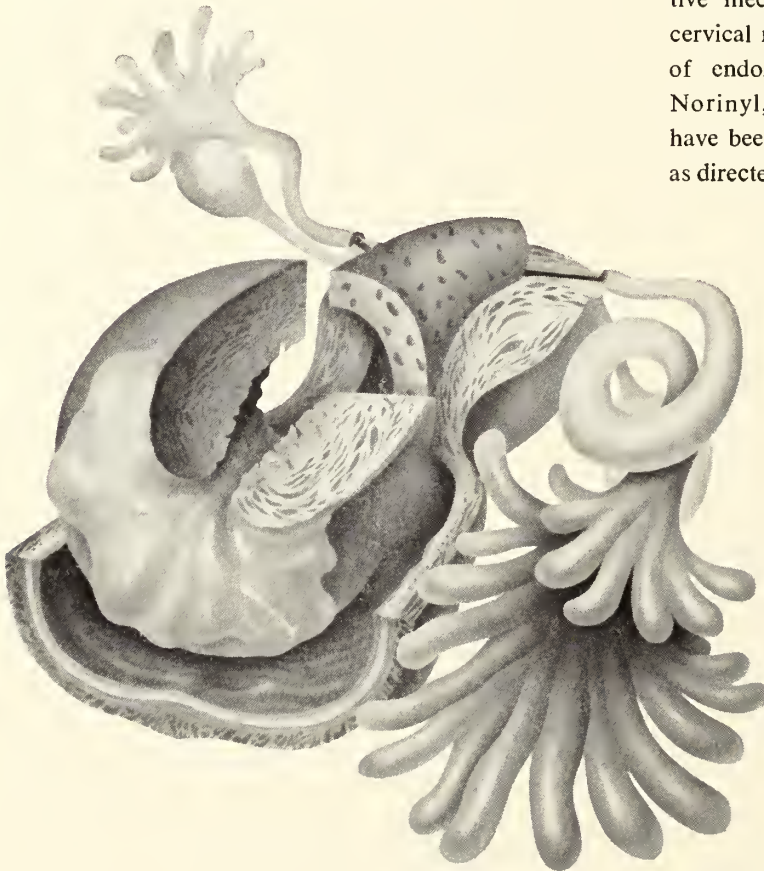
**inhibition of ovulation by means of
2 time-proved hormonal agents**

**production of a cervical mucus hostile to
sperm motility and vitality**

**creation of an endometrium unreceptive
to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs JAMA 187:664 (Feb 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W. Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R. Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O. Ibid 6. Rice-Wray, E. J. Goldzieher, J. W. and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kemper, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
SYNTEX
LABORATORIES INC. PALO ALTO, CALIF.

Norinyl[®] tablets
(norethindrone 2 mg c mestranol 0.1 mg)

for multiple contraceptive action

THE REAL MEANING OF FREEDOM

By Mabelle Segrest
Of The Macon Academy
Tuskegee, Alabama

The Journal is proud to present the text of an essay which won first prize in the Veterans of Foreign Wars' national contest. It was written by 16-year-old Mabelle Segrest of Tuskegee and expresses sentiments worthy of all American citizens.

In reading about democracy and considering what it means to me, two ideas kept recurring.

Included in every definition of democracy was always the term "the people"—by Lincoln's definition, "government of the people, by the people and for the people."

But to me, before you could have "the people" you must first have "the person." That was the first idea—the individual.

The highest and most important goal of democracy is to protect the right of a man to be an individual—to think without fear, to worship as he chooses, and to act according to his own conscience. It is only when this "unalienable" right has been insured that "the people" can be effective.

Then I came to the second idea—"the people."

No man is an island, entire of itself—nor does he want to be. People are involved in other people and when they are, there must be rules governing their relationship. In a democracy, these laws that govern "the people" are made by them and enforced by them. In this social relationship, "the individual" becomes "the citizen."

There are very few citizens who can by themselves affect the course of their government. They have to act collectively to have any force at all. Citizens with similar views tend to form organizations through which they can all co-operate to reach their common goal. This is the principle behind political parties, churches, clubs—all organizations.

It is a principle vital to democracy. It is contained in the very word itself: "democ-

racy" comes from Greek words meaning, literally, "rule by the people." But "rule by the people" can all too easily degenerate into "rule by the mob." When people act collectively without first thinking independently, "the people" become "the mob." But democracy protects the right to think independently and in so doing protects itself.

What does all this mean to me personally:

Very simply this: I AM FREE.

As a student in an American high school I am freer than any other student in any other country in the world. I am free to be a scientist, a housewife, a beggar, a Protestant, an atheist, a communist—I am free to criticize or praise—to work or to loaf. I am free to be myself.

So what can I do to protect this precious right?

I can exercise it.

If I don't exercise my rights, I shall lose them. If democracy protects my right to be an individual, then my acting and thinking as an individual will protect democracy.

And what can my generation do to ensure democracy for our children? Before we can do anything, we must first realize how precious is that which we have. I remember a speaker at commencement one year saying, "Most Americans don't know what freedom is, and because they don't know, they're losing it. And they don't even know it's gone, because they didn't know what it was when they had it."

We must first realize what we have, then

(Continued on Page 494)



this part for diarrhea

Kaolin exerts a demulcent action along the gastrointestinal tract and a detoxifying action in the intestines to diminish irritation of the mucosa and lessen hyperperistalsis, nausea and diarrhea.

Pectin exerts its demulcent effect in the entire tract and its detoxifying action primarily in the large bowel to diminish irritation of the mucosa and help restore normal intestinal flora and function.



this part for its discomforts

Belladonna alkaloids as in Donnatal® relieve hypermotility of smooth muscle in the gastrointestinal tract to help control cramping, nausea, and painful straining. Many clinicians consider the belladonna components of Donnagel® to be medicine's most effective depressants of intestinal motility.^{1,2} A preparation containing only kaolin and pectin, on the other hand, has "little or no effect on cramps simply because it does not include an agent with antispasmodic action."³

Donnagel® treats the whole diarrhea problem.

Available in new 4-ounce plastic bottle on your prescription or recommendation. Also available: Donnagel®-PG (with paregoric equivalent) and Donnagel® with Neomycin. See product literature before prescribing.

References: 1. Kramer, P., and Ingelfinger, F.J.: Med. Clin. N. Amer., 32:1227, 1948. 2. Hock, C.W.: Clin. Med., 8:1932, 1961. 3. Winfield, I.W.: Am. J. Gastroent., 37:438, 1959.

A-H-ROBINS

A. H. Robins Company, Inc.
Richmond, Virginia 23220



"CLEAR THE TRACT" WITH

oughing ahead...

Clear the Respiratory Tract with Robitussin.

More than just a slogan, "clear the tract" reflects the dependable
cough-expectorant action of the three Robitussin formulations.
Robitussin contains glyceryl guaiacolate, the time-tested expectorant
which greatly enhances the output of lower respiratory tract fluid.
Increased RTF volume exerts a demulcent effect on the tracheobronchial
mucosa, promotes ciliary action, and makes thick, inspissated
secretions less viscid and easier to raise. Glyceryl guaiacolate is safe,
non-narcotic, and almost universally accepted by patients of all ages.

ROBITUSSIN FORMULATIONS	FORMULAS		
	ROBITUSSIN	ROBITUSSIN A-C	ROBITUSSIN-DM
COUGH EXPECTORANT	●	●	●
DEMULCENT	●	●	●
COUGH SUPPRESSANT		●	●
HISTAMINE		●	
LONG-ACTING (12 hours)			●
ROBITUSSIN[®] in each 5 cc. teaspoonful: Glyceryl guaiacolate 100 mg. (Alcohol 3.5%)			
ROBITUSSIN[®] A-C (<i>exempt narcotic</i>) in each 5 cc. teaspoonful: Glyceryl guaiacolate 100 mg. Pheniramine maleate 7.5 mg. Codeine phosphate 10.0 mg. (warning: may be habit forming) (Alcohol 3.5%)			
ROBITUSSIN[®]-DM <i>new, non-narcotic</i> in each 5 cc. teaspoonful: Glyceryl guaiacolate 100 mg. Dextromethorphan hydrobromide 15 mg.			
Robitussin and Robitussin-DM are available at pharmacies everywhere on your prescription or recommendation. A. H. Robins Company, Inc. Richmond, Va.			

PHOTO:
No. 89 of the Monadnock, Steamtown
Northern Railway pulls a trainload of
enthusiasts through the New England
scenery between Bellows Falls and Chester, Vermont.

A·H·ROBINS

ONE OF THE ROBITUSSIN[®] FORMULAS

THE REAL MEANING OF FREEDOM

(Continued from Page 490)

no one will have to sell us any line about keeping it.

But simply wanting freedom to endure is never enough. If we expect democracy to survive, we must work for it—and, if necessary, fight for it.

We cannot praise democracy then sit at home on election day.

We cannot praise our laws then sit back when we see them broken because “we don’t want to get involved.”

We cannot praise freedom of speech then remain silent when we see our rights trampled.

And when we do speak out, we must not be solely critical, but constructive also.

My generation—the “younger generation”—seems to be coming into focus as a generation of protest.

“End the war in Viet Nam!”

“Peace at any price!”

But it does no good to decry the war in Viet Nam without then offering a practical alternative. “Peace at any price” is slavery. The right to criticize must be coupled with the responsibility of trying to correct what is criticized.

We must not merely tear down the bad, the unjust, then walk away from the rubble. We must build something better. That is the responsibility, the challenge, and the privilege of my generation.

SCOPE OF AMA-ERF

The American Medical Association Education and Research Foundation (AMA-ERF) is looked upon generally as being an agency created to provide cash loans to medical students, interns and residents.

This is true, but it is only part of the truth. AMA-ERF is far more than a lending agency—it is a growing and changing organization

which is sensitive and responsive to the needs of the times. It is a vehicle for worthwhile programs whose financing requires funds from sources outside of the budget of the AMA itself.

That AMA-ERF has given substantial financial assistance through its loan program to students, interns and residents is supported by the record. Since the program’s inception in 1962 an average of 7,000 loans have been extended annually. These young men and women are able to borrow up to \$1,500 a year through this program to help meet essential training and living expenses.

But this is only one phase of the AMA-ERF program. Another program within the area of education is the financial support given to approved medical schools. Each year AMA-ERF raises more than \$1,000,000 in contributions from physicians and woman’s auxiliaries for this program.

Frequently overlooked is the AMA-ERF activity in the area of research. In October, 1965, a new facility for basic research into life processes was opened. Eventually from 20 to 25 senior scientists, with associates and technicians, will devote their full energies to basic research in cellular biology without the distractions of teaching or performing administrative chores.

A second research program launched by AMA-ERF is on tobacco and health. Initiated in 1963, the goal is to determine which significant human ailments may be caused or aggravated by smoking, how they may be caused, the particular element or elements in smoke that may be the causal or aggravating agents, and methods of eliminating such agents.

The AMA initially allocated \$500,000 to launch this project and subsequently six major tobacco companies pledged \$10,000,000 over a five-year period for the same project.

These are the programs of AMA-ERF today. Others will be adopted in the years ahead and current programs will be retired if they have attained their objectives.

U. S. NEARS MILESTONE IN MEDICAL EDUCATION

The U. S. is fast approaching another medical milestone.

The graduations from medical schools this spring will push the nation's physician population over the 300,000 mark.

In addition to personal achievement, the crossing of the 300,000 barrier will symbolize the nation's progress in producing more and more doctors of medicine to meet the increasing demands for medical care in a growing population.

"The number of physicians in this country has been increasing faster than the general population for several years. All available evidence indicates this trend will continue for at least the next 20 years.

The physician-population ratio—which is the number of physicians divided into the total population—has materially improved just since 1960.

At the end of 1960, there were 253,000 MDs in the U. S., or one physician for every 737 people. By the end of 1965, the physician population rose to 292,000 or one for every 681 people in the general population.

The Council on Medical Education of the American Medical Association forecasts that by 1975 there will be one physician for every 638 people, and by 1985 that ratio will have improved still further to one physician for every 619 people.

The optimistic outlook is based on solid fact.

1.—There are now 88 medical schools in the U. S.—10 new schools built since 1947 and a former osteopathic college converted into a fully accredited medical school. By 1970, an additional 13 schools will be in operation. Six more are virtually assured and another six are possible by 1975. Approximately 25 others have been proposed.

2.—There are more applicants to medical schools, more students enrolled and more

MDs being graduated than ever before. In the 1964-65 school year, the 88 medical schools had a total enrollment of 32,428 students and graduated a record 7,409 new MDs. With new medical schools coming up and existing schools expanding, the AMA Council on Medical Education anticipates that graduates will reach 8,000 by 1970 and climb to 9,000 by 1973 and to 10,000 by 1975.

A large measure of the credit for this improving picture must be given to the nation's physicians who have supported extensive careers programs through AMA and the state medical associations.

In spite of this optimistic outlook he was not saying there are enough physicians to satisfy all demands for medical care. Nor do we intend to suggest that there is a shortage of physicians.

We don't know anyone inside or outside the medical profession who claims we have enough doctors. We do know, however, that a ratio of physicians to population, whether it is going up or down, is not an adequate test of whether there is or is not a shortage.

Ratio by itself does not recognize that an apparent shortage of physicians may in fact be a problem of distribution. Ratio is a cold statistic which tells us nothing about how much more is demanded of the physician today than his counterpart of 20 or 30 years ago.

Nor does a recitation of ratios explain that today's physician can take care of more patients today than the physician of 20 or 30 years ago because of the tremendous progress in medical science, because better streets and highways make it easier for patients to get to their doctors and doctors to their patients, because communications have improved enormously, and because more and better trained ancillary personnel have relieved the pressures on the doctor.

vignettes of angina pectoris —
no. 1 in a series:

angina and the surgeon

John Hunter—

British surgeon (1728-1793)

angina of anger

"My life is in the hands of any rascal who chooses to annoy and tease me."¹ So said the great British surgeon and anatomist, John Hunter, realizing that he could not control the anger which precipitated frequent and severe attacks of angina pectoris. According to Mettler: "His statement was no exaggeration. On October 16, 1793, he attended a meeting of the St. George's hospital staff, and, while defending the interests of several students, he was contradicted and thoroughly antagonized. The pains of angina commenced, he started toward another room, gained it, and fell dying into the arms of a physician."²

Why Edward Jenner withheld his paper on angina In 1777, at an earlier stage of the condition, Hunter's angina alarmed a favorite pupil, Edward Jenner, who wrote to Dr. Heberden that he feared his teacher was "affected with symptoms of the Angina Pectoris."³ So concerned was Jenner about his former teacher's emotion-related condition that he deliberately cancelled publication of a paper on angina pectoris, fearing that

Hunter would read it, and "his fears excited by its truly formidable nature."⁴

Severity of angina described by Hunter's brother-in-law, Dr. Everard Home, who witnessed his death and performed an autopsy, gave this account of the late stages of the condition:

"... the pain became excruciating at the apex of the heart; the patient was so sore as not to allow of an attempt to swallow anything and the left arm could not bear to be touched...."

"The affections above described were, in the beginning, really brought on by exercise... He at last seized him when lying in bed, and in his sleep...."⁵



18th century ancestor of the modern coronary and cardiac surgeon, anatomist, pathologist, physiologist, geologist, and naturalist, John Hunter had a passion for anatomy which led him to disregard his practice, his health and even

When the Irish giant O'Brien that Hunter desired his for a museum, he willed body be sunk at sea in a fin. But Hunter was not to ed. According to Major, he ed the watchers and finally d the body at a cost of 500 although he had to borrow ey to pay the men."³ he experimentally inocu- mself with gonorrhea and treated himself with y for three years, and was tly cured.⁵ Hunter had of inadequacy about his on and speaking ability, did not prevent him from rd driving and abrupt colleagues. His competi- with his physician older was also well known, and a complete estrangement e the two men.^{2,3} Today, the ity traits seen in John are recognized to be impor- disposing factors in the devel- of coronary artery disease— nifested as angina pectoris. ng to Friedman and Rosen- a group of men whose be- as characterized by intense n and competitive drive, a than average incidence a pectoris was among those l conditions noted.

1. Paget, S., cited by Mettler, *History of Medicine*, Philadelphia, Lippincott Company, 1947, p. 85.
2. C. A.: *Op. cit.*, pp. 84-85.
3. R. H.: *A History of Medicine*, 1. Ill., Charles C Thomas, 1954, pp. 601-607. 4. Baron, J., cited by H.: *Op. cit.*, p. 607. 5. Major, R.: *Descriptions of Disease*, ed. 3, 1. Ill., Charles C Thomas, 1955, p. 601.
6. Friedman, M., and Rosenman, J. *M.A.* 169:1286, 1959.

in the modern
management of
angina pectoris

Peritrate® SA

Sustained Action (pentaerythritol tetranitrate) 80 mg.

Each double-layer, biconvex, dark green/light green tablet of Peritrate SA Sustained Action contains:
pentaerythritol tetranitrate 80 mg.
(20 mg. in immediate release layer and 60 mg. in sustained release base)

Peritrate (pentaerythritol tetranitrate) is a nitric acid ester of a tetrahydric alcohol (pentaerythritol).

Actions: The exact cause of angina pectoris (that is, the pain associated with coronary artery disease) remains obscure, despite the numerous and often conflicting hypotheses concerning its pathophysiology. Therapy at the present time, therefore, remains essentially empiric. Customarily, clinical improvement has been measured by: reduction in (1) number, intensity and duration of angina pectoris attacks and (2) necessity for glyceryl trinitrate intake for prevention or relief of anginal attacks.

Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. has been reported in clinical usage to reduce in number and severity the incidence of angina pectoris attacks, with concomitant reduction in glyceryl trinitrate intake.

In the evaluation of Peritrate (pentaerythritol tetranitrate) and Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. in angina pectoris, clinical improvement has been customarily measured subjectively by reduction in number and severity of attacks and necessity for glyceryl trinitrate intake for prevention or abortion of anginal attacks. Individual patterns of angina pectoris differ widely as does the symptomatic response to anti-anginal agents such as pentaerythritol tetranitrate. The published literature contains both favorable and unfavorable clinical reports. In conjunction with total management of the patient with angina pectoris, Peritrate (pentaerythritol tetranitrate) and Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. have been accepted as safe for prolonged administration and widely regarded as useful.

Animal pharmacology: In a series of carefully designed studies in pigs, Peritrate (pentaerythritol tetranitrate) was administered for 48 hours before an artificially induced occlusion of a major artery and for seven days thereafter. The pigs were sacrificed at various intervals for periods up to six weeks. The result showed a significantly larger number of survivors in the drug-treated group. Damage to myocardial tissue in the drug-treated survivors was less extensive than in the untreated group. Pigs rather than dogs were used because their coronary artery distribution more closely resembles that of human beings. Studies in dogs subject to oligemic shock through progressive bleeding have demonstrated that Peritrate (pentaerythritol tetranitrate) is vasoactive at the post-arteriolar level, producing increased blood flow and better tissue perfusion. These animal experiments cannot be translated to human behavior.

Indications: Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. is indicated for the relief of angina pectoris (pain associated with coronary artery disease). It is not intended to abort the acute anginal episode but is widely regarded as useful in the prophylactic treatment of angina pectoris.

Contraindications: Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. is contraindicated in patients who have a history of sensitivity to the drug.

Warning: Data supporting the use of Peritrate (pentaerythritol tetranitrate) during the early days of the acute phase of myocardial infarction (the period during which clinical and laboratory findings are unstable) are insufficient to establish safety.

Precautions: Should be used with caution in patients who have glaucoma.

Adverse reactions: Side effects reported to date have been predominantly related to headache (which may require discontinuation of medication) and gastrointestinal distress which are usually transient with continuation of medication.

Dosage: Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg., 1 tablet immediately on arising and 1 tablet 12 hours later (on an empty stomach).

Additional dosage forms
Peritrate (pentaerythritol tetranitrate) — 10 mg. and 20 mg. tablets with or without phenobarbital.

Peritrate with Phenobarbital SA Sustained Action — 80 mg. pentaerythritol tetranitrate and 45 mg. phenobarbital.

(Warning: Tablets containing phenobarbital may be habit forming.)



WARNER-CHILCOTT
Morris Plains, N. J.



following infection

B and C vitamins are therapy: STRESSCAPS B and C vitamins in therapeutic amounts...help the body mobilize defenses during convalescence...d response to primary therapy. The patient with a severe infection, and may others undergoing physiologic stress, may benefit from STRESSCAPS capsules.



Stresscaps[®]
Stress Formula Vitamins Lederle



Each capsule contains:
Vitamin B₁ (as Thiamine Mononitrate) 10 mg
Vitamin B₂ (Riboflavin) 10 mg
Vitamin B₆ (Pyridoxine HCl) 2 mg
Vitamin B₁₂ Crystalline 4 mcgm
Vitamin C (Ascorbic Acid) 300 mg
Niacinamide 100 mg
Calcium Pantothenate 20 mg
Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York



626-6-12



around the state

\$1.6 MILLION GRANT FOR NEEDY CHILDREN CARE

Needy children of Jefferson County will benefit from a \$1.6 million grant awarded to the University of Alabama Medical Center by the Children's Bureau of the Department of Health, Education and Welfare. The funds will go for comprehensive medical and dental care of children from low-income families. The grant will be administered in conjunction with the Jefferson County Public Health Department which will be charged with screening of all patients.

The funds were made available through Public Law 8997, on a matching basis. The Medical Center, including Children's Hospital, provided the matching monies and services required to secure the grant.

Dr. Herschel Bentley, professor and chairman of the Pediatrics Department and project director, said the funds will enable children who couldn't otherwise afford it to have in-patient and out-patient care. Both University Hospital and Children's Hospital will admit these patients. Dental care will be provided through the University of Alabama School of Dentistry, which is also associated with Children's Hospital and the Jefferson County Public Health Department.

"Many of these children have been receiving care at the Medical Center," Dr. Bentley said, "but our funds and resources were limited. Now many more can receive treatment."

Dr. Bentley said, however, that more personnel will have to be recruited, and it would

possibly be a year before the program is in full operation.

A unique aspect of the grant will be provisions for an Adolescent Unit, one of the few in the country. Children aged one through eighteen years will be eligible for medical and dental care.



Dr. Cecil Sanders (top) and Dr. Manley Cummins, Jr., President of Houston County Medical Society, both of Dothan, are shown at a recent meeting of the Houston County Medical Society. In the bottom photo are Mrs. Gordon A. Atkinson and Dr. Atkinson of Dothan, and Mrs. S. P. Marshall, Mobile.

HEALTH CAREERS COUNCIL "ADVERTISING CAMPAIGN"

The Health Careers Council of Alabama has finalized its plans for initiating an "Advertising Campaign" beginning November 1 and running through the end of the year. The campaign is being conducted in an effort to create more awareness of the career opportunities in the health field with the hope that it will attract more qualified individuals into the health professions. Outdoor advertising, radio and television are the media to be utilized in the following areas: Montgomery, Birmingham, Auburn, Huntsville, Mobile, and Tuscaloosa. A contest will be held in conjunction with the campaign in an effort to measure the results of the program. The only requirement for entering the contest would be for individuals to send a card saying "Yes, I Would Like to Find Out More About a Health Career". All cards would be assembled and a drawing would be held. The number of winners is undetermined at this point, but winners will receive all-expense paid weekend trips for themselves and their guidance counselors. (The location has not been determined.) A sponsor is being sought to finance the trip and more details regarding that aspect will be available at a later date.

In addition to the two-month program, plans are now being made to also have a followup publicity program during the entire year of 1967.

The Health Careers Council believes that this advertising campaign will do much to create a public awareness of the many career opportunities in the health field and takes this opportunity to recognize the following contributors who have made it possible for the Council to initiate this program:

David Warner Foundation, Tuscaloosa

O'Dell Drug Company, Birmingham

Harlan Prater, Fayette

Birmingham Regional Hospital Council,
Birmingham

Durr Surgical Supply Company, Birmingham-Montgomery

Charles McCauley, Architects, Birmingham

J. L. Bedsole, Mobile

General Surgical Supply, Birmingham

Liberty National Insurance Company, Birmingham

Bedsole Surgical Supply Company, Mobile

Alabama Hospital Association, Montgomery

Monroe County Hospital Auxiliary, Monroeville

Macon County Hospital Auxiliary, Tuskegee

Alabama Association of Pathologists

Lee County Hospital Auxiliary, Opelika

Lloyd Noland Hospital Auxiliary, Fairfield

North Alabama League for Nursing

Alabama Society of Medical Technologists

Alabama State Nurses Association, Montgomery

William L. Hawley, M. D., Birmingham

University Hospital Auxiliary, Birmingham

Alabama Association of Medical Record Librarians

Mrs. Earl B. Wert, Mobile

Eugene H. Dibble, M. D.

E. B. Robinson, Jr., M. D.

Bodine, Bryson and Rolling, Birmingham

Boaz-Albertville Hospital Auxiliary, Boaz

Mobile Infirmary Auxiliary, Mobile

North Jackson County Hospital Auxiliary,
Stevenson

Pepperell Manufacturing Company, Opelika

Alabama League for Nursing

Anniston Memorial Hospital Auxiliary, Anniston

Cecile and Leonel Weil Fund, Inc., Montgomery

Chilton County Hospital Auxiliary, Clanton
Jackson County Hospital Auxiliary, Scottsboro

West Point Manufacturing Company, Langdale, Alabama-West Point, Georgia

Colbert County Hospital Auxiliary, Sheffield

ANNOUNCING a potent combination in
truly delicious orange-flavored forms:

ERYTHROCIN[®]-SULFAS

ERYTHROMYCIN ETHYL SUCCINATE-TRISULFAPYRIMIDINES



in
chewable
tablets

in granules
for oral
suspension

When combination antibiotic
therapy is indicated...



CONSIDER: an exceptionally high cure rate in susceptible infections

The rationale: When combined, Erythrocin and the trisulfapyrimidines (triple sulfas) are indicated in infections that are more susceptible to the combination than to either agent alone. Such conditions are usually found in urinary, lower respiratory tract and chronic ear conditions.

The results: Clinical studies involving 142 young patients showed *an overall cure rate of*

96.5%. Side effects were experienced by only four of the patients.

The acceptance: The majority of the 142 patients studied expressed a definite liking for the products. *There were only two refusals.* An independent taste-test with 50 healthy children further substantiated the excellent acceptability of the orange-flavored forms.

602061

ERYTHROCIN[®]-SULFAS
ERYTHROMYCIN ETHYL SUCCINATE-TRISULFAPYRIMIDINES

In Chewable Tablets
In Granules for Oral Suspension



ERYTHROCIN-SULFAS

Brief Summary

Indications: Use Erythrocin-Sulfas in infections more susceptible to the combination than to either agent alone. These are usually found in urinary, lower respiratory tract, and chronic ear infections.

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or new born infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions: Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

If a reaction or overgrowth of nonsusceptible organisms occurs, withdraw the drug.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. each of sulfadiazine, sulfamerazine and sulfamethazine. 603303



Twelve Alabama Surgeons Inducted Into Fellowship

Approximately 1,350 surgeons—including 12 from Alabama—were inducted October 14 as new Fellows of the American College of Surgeons in cap-and-gown ceremonies during the annual five-day Clinical Congress of the world's largest organization of surgeons at San Francisco.

Alabama surgeons inducted were Drs. Alan R. Dimick, Gerald P. Falletta, Julius N. Hicks, Wilfred F. Holdefer and Holt A. McDowell Jr., all of Birmingham; Drs. Robert L. Dorrough and Julius Pryor Jr., Montgomery; Drs. Jasper D. Moore and William C. Smith, Selma; Dr. Guy B. Wilder Jr., Decatur; Dr. Robert T. L. Long, Russellville; and Dr. Joe W. O'Neal, Tuscaloosa.

Fellowship, a degree entitling the recipient to the designation "F. A. C. S." following his name, is awarded to those surgeons who fulfill comprehensive requirements of acceptable medical education and advanced training as specialists in one or another of the branches of surgery, and who give evidence of good moral character and ethical practice.

The American College of Surgeons is a scientific, educational and voluntary association of surgeons, numbering 27,000 Fellows in 83 countries. The College was founded in 1913 to improve care of the surgical patient, and has pioneered in many directions in making surgical care as excellent as it is today.

Franklin Medical Society Meets

Dr. Anthony P. Jerome was the featured speaker at a recent meeting of the Franklin County Medical Society. The meeting was held at the North Alabama Hospital in Russellville. Dr. Wayne P. Hyatt, secretary of the society, reported that the group's August meeting was a social at the Woodland Hills Civic Center.

Behind continued high blood pressure readings lies the possibility of organic damage¹⁻¹³

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.¹

There is one aspect of hypertension, however, that seems, in many cases, predictable. "... when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."¹⁴ All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.



"Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."⁴

"[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."¹⁰

"... most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."¹

"In short, treatment is indicated."¹

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.⁷

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.¹⁴ Essential hypertension is an indication not only for treatment, but for early and adequate treatment of the patient in question.

Reduce the blood pressure with Rautrax-N

Rautrax-N combines the antihypertensive-tranquilizing action of whole root rauwolfia with the antihypertensive-diuretic action of bendroflumethiazide in one convenient medication. The two drugs complement each other

so that smaller doses of both are possible.

Rauwolfia combined with bendroflumethiazide is particularly effective in long-term therapy,¹⁵⁻¹⁷ since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

References: 1. Page, I. H., and Dustan, H. P.: The Usefulness of Drugs in the Treatment of Hypertension, in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: *Controversy in Internal Medicine*, Philadelphia, W. B. Saunders Co., 1966, p. 95. 2. Hollander, W.: The Evaluation of Antihypertensive Therapy of Essential Hypertension in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: *Controversy in Internal Medicine*, Philadelphia, W. B. Saunders Co., 1966, p. 97. 3. Nickerson, M.: *Antihypertensive Agents and the Drug Therapy of Hypertension*, in Goodman, L. S., and Gilman, A.: *The Pharmacological Basis of Therapeutics*, ed. 3, New York, The Macmillan Co., 1965, p. 727. 4. Berkson, D. M.: *Indust. Med. & Surg.* 32:371, 1963. 5. Cohen, B. M.: *M. Times* 91:645, 1963. 6. Lee, R. E., et al.: *Am. J. Cardiol.* 11:738, 1963. 7. Moyer, J. H.: *Am. J. Cardiol.* 9:821, 1962. 8. Moser, M.: *New York J. Med.* 62:1177, 1962. 9. Wood, J. E., and Battey, L. L.: *Am. J. Cardiol.* 9:675, 1962. 10. Moyer, J. H., and Heider, C.: *Am. J. Cardiol.* 9:920, 1962. 11. Moser, M., and Macaulay, A. I.: *New York State J. Med.* 60:2679, 1960. 12. Judson, W. E.: *Nebraska M. J.* 44:305, 1959. 13. Hodge, J. V.; McQueen, E. G., and Smirk, H.: *Brit. M. J.* 1:5218, 1961. 14. Moyer, J. H., and Brest, A. N.: *Hypertension Recent Advances*, Philadelphia, Lea & Febiger, 1961, p. 633. 15. Berry, R. L., and Bray, H. P.: *J. Am. Geriatrics Soc.* 10:516, 1962. 16. Reid, W. J.: *J. Am. Geriatrics Soc.* 13:365, 1965. 17. Feldman, L. H.: *North Carolina M. J.* 23:248, 1962.

Contraindications: Severe renal impairment or previous hypersensitivity. **Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

Precautions and Side Effects: The dose of ganglionic blocking agents, veratrum or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Caution is indicated in patients with depression, suicidal tendencies, peptic ulcer; electrolyte disturbances are possible in cirrhotic or digitalized patients. Marked hypotension during surgery is possible; consider discontinuing two weeks prior to elective surgery and observe patients closely during emergency surgery. Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression, diarrhea, weight gain, edema, drowsiness may occur. Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients, and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, rashes may occur.

Dosage and Supply: Initial dosage, 1 to 4 tablets daily, preferably at mealtime. Maintenance, 1 or 2 tablets daily. Rautrax-N is supplied as capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin®), 4 mg. bendroflumethiazide (Naturetin®), 400 mg. potassium chloride.

Also available: Rautrax-N Modified — capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin), 2 mg. bendroflumethiazide (Naturetin), 400 mg. potassium chloride. Both potencies available in bottles of 100. For full information, see Product Brief.

RAUTRAX-N

Squibb Rauwolfia Serpentina Whole Root (50 mg.) with Bendroflumethiazide (4 mg.) and Potassium Chloride (400 mg.)

SQUIBB



'The Priceless Ingredient' of every prod is the honor and integrity of its maker.

BLITZ ON SYPHILIS IN ALABAMA

W. H. Y. Smith, M. D., M. P. H.*

The Resurgence of syphilis in the United States in the years 1957-65 demands that every public health agency, and also private medicine, redirect their combined efforts to combating the steadily rising incidence. In Alabama, where the number of reported cases of primary and secondary syphilis has increased each year since 1959, the rate of increase was three times greater than the national rate of increase for the years 1957-65 (fig. 1).

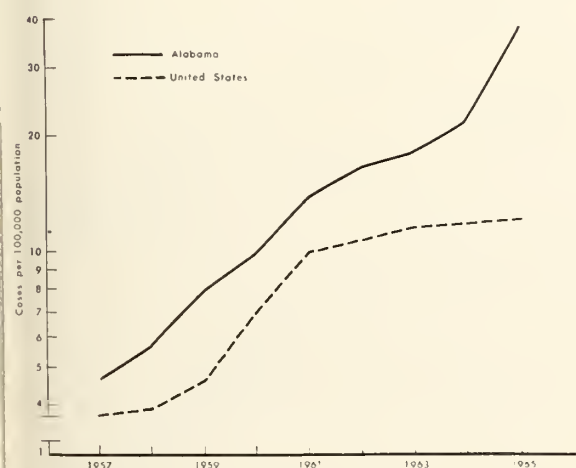


Figure 1. Primary and secondary cases of syphilis in Alabama and the United States, fiscal years 1957-65.

Because the increases in Alabama reflected reported infectious syphilis morbidity for the entire State, the staff of the Alabama Department of Public Health made a detailed analysis of the data to pinpoint the population groups within which increases were most pronounced. Contrary to the urban trends in many other States, increases in Alabama

since early 1964 have also occurred in rural areas (fig. 2). As a result, the concept of a blitz on syphilis was created.

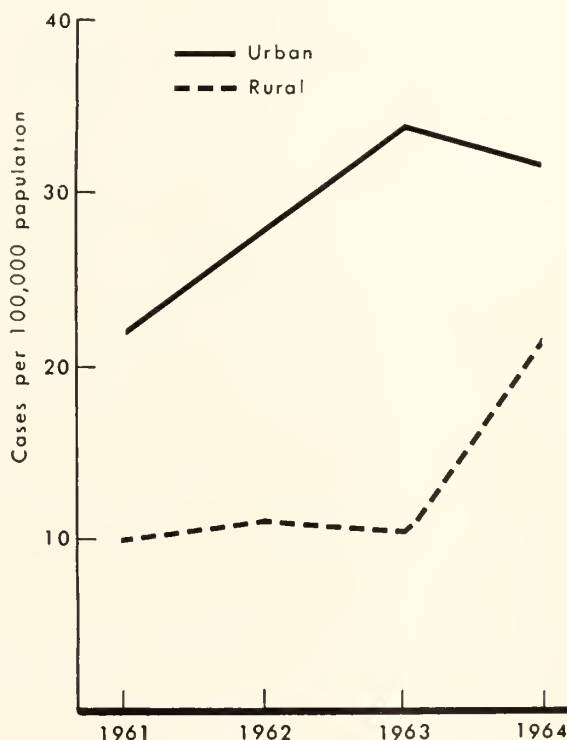


Figure 2. Primary and secondary cases of syphilis in urban and rural areas of Alabama, fiscal years 1961-64.

NOTE: Date of onset of 10 cases in the primary stage and of 1 early latent case was unknown.

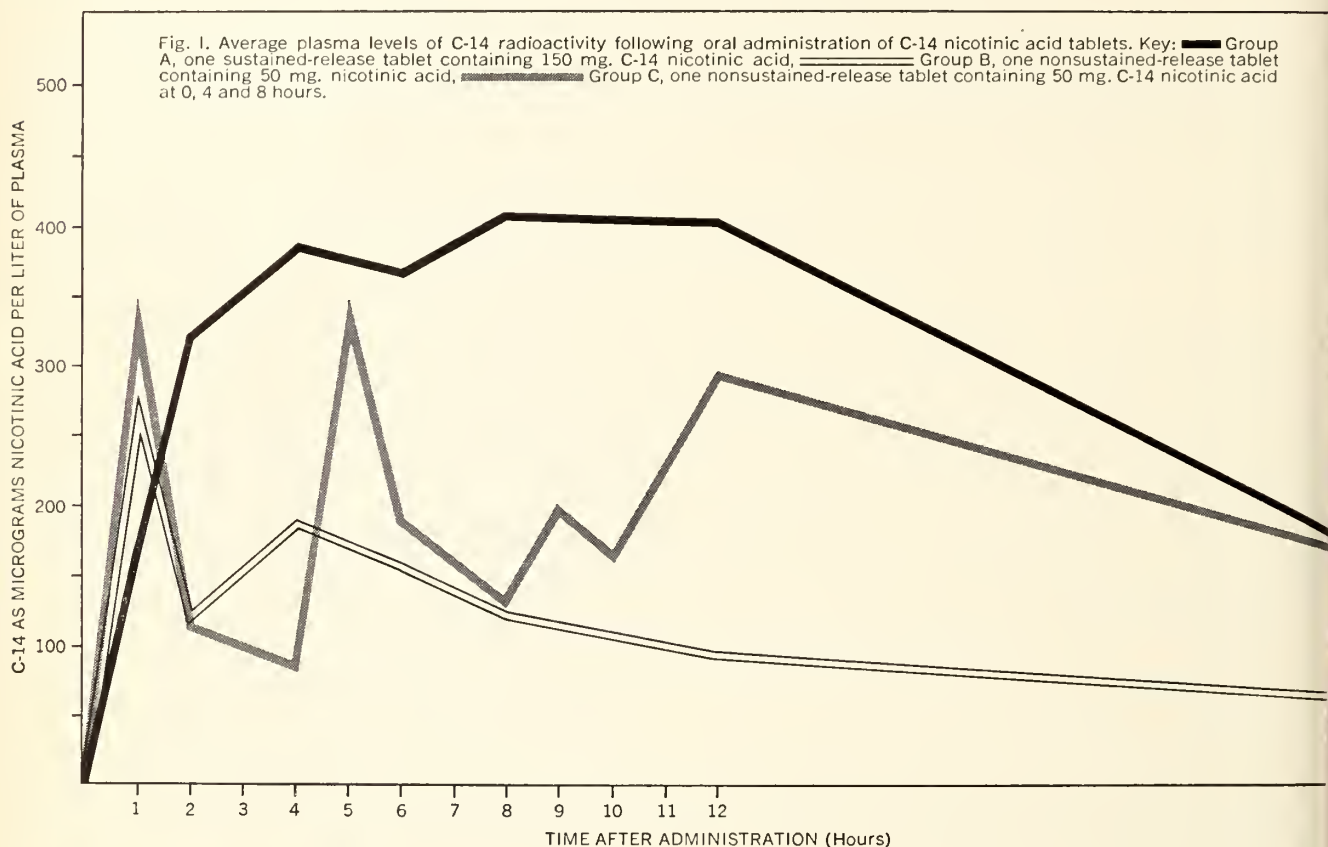
Method

The syphilis blitz is an intensive campaign to effect rapid examination and treatment of named contacts of persons already infected with syphilis or to prevent development of the disease in contacts who have been exposed to infectious persons while these persons were infectious. Because of

(Continued on Page 508)

*Dr. Smith is director of the bureau of preventable diseases, Alabama State Department of Public Health, Montgomery.

Sustained circulatory, respiratory and cerebral stimulation for the



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

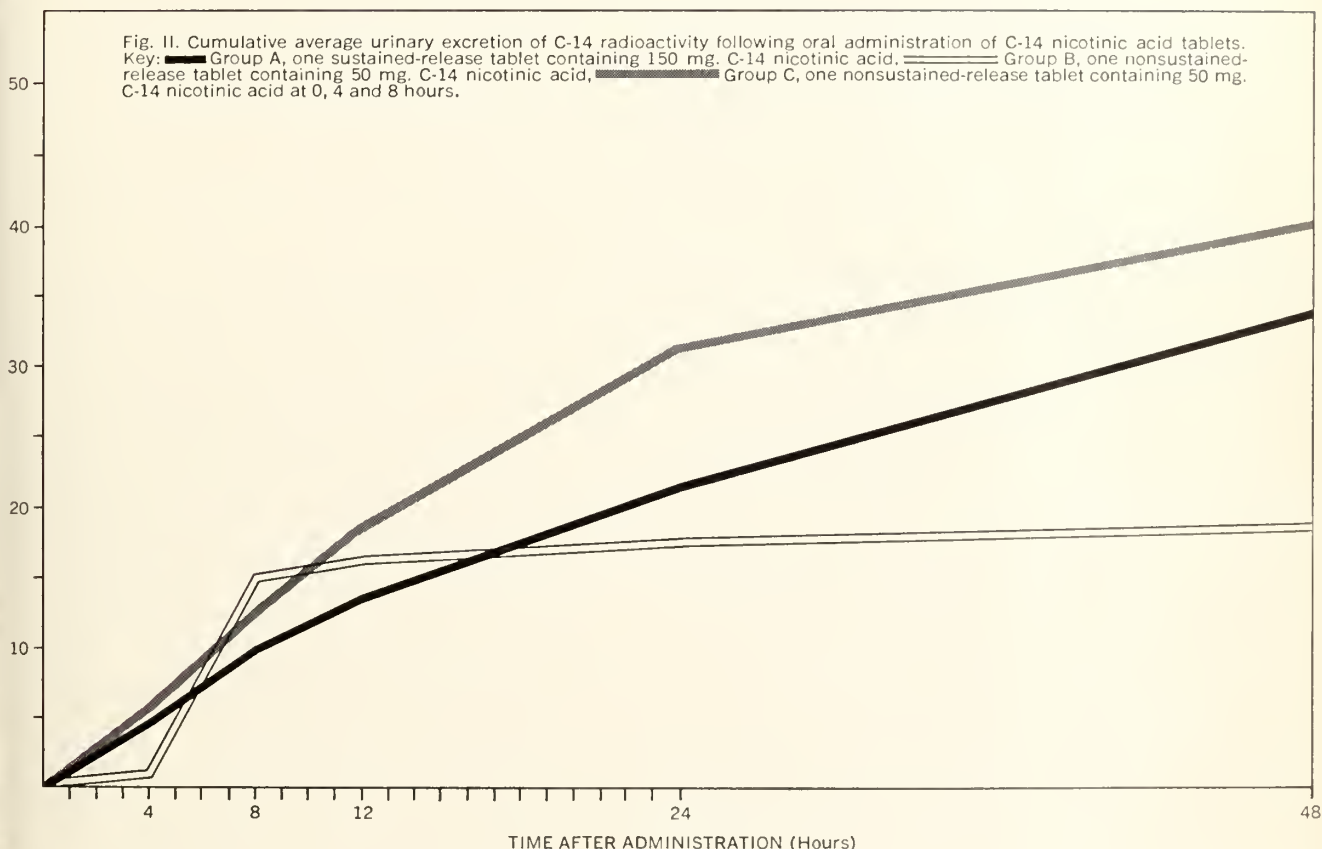
mindedness or senile confusion. Therapy can be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation with a minimum amount (if any) of "flushing." A cerebrovascular circulation is complemented by ptylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert.

ged and debilitated

Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



ess confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, pathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylentetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylentetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

"First with the Retro-Steroids"

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(Continued from Page 505)

exposure to the disease, any member of the second group of contacts whose serologic tests upon his initial examination are found to be negative is advised to accept treatment (2.4 million units of benzathine penicillin G or an alternate antibiotic). Evidence of exposure is subsequently confirmed through confidential epidemiologic interviews with both patients and their contacts.

A blitz is directed to any specific area of the State which evidences one or a combination of the following surveillance factors over a relatively short period:

1. Requests for epidemiologic tracing of several persons with addresses in the area who have been named as contacts of persons with a diagnosis of early syphilis. (The persons with diagnosed cases may reside in the area or in other health jurisdictions.)
2. Laboratory reports showing high titers in serologic tests for a number of persons in the area.
3. Several cases of early syphilis being reported by the health department or by physicians within the area.

Since the Alabama Department of Public Health is the center clearinghouse for all morbidity and epidemiologic data, its staff compare any or all of these three factors, or others, with similar data for the specific area for previous periods. Therefore the department is usually the agency which determines whether a blitz is needed. It also initiates the total operation, from preliminary planning to actual supervision, and to a marked degree carries out the prescribed procedures.

Initially, in the preliminary planning, approval is obtained from the local medical society and the individual county board of health. Approval hopefully implies a commitment of cooperation and, within practical limitations, virtually active participation on the part of the sanctioning agencies. Next, detailed clinic arrangements are made with the county health officer. Services of a nurse or nurses are requested.

Two waiting rooms are desirable, one for

persons awaiting examination and treatment and the other for persons awaiting an epidemiologic interview and post-treatment observation. By separating these two groups, ideas of painful injections are not magnified, false histories by patients of drug sensitivity or allergic reactions are reduced, and expressions of fright and other emotional situations tend to be eliminated. Also, penicillin-treated patients are kept under constant observation for 30 or more minutes before being dismissed from the clinic. Observations can also be made in both waiting rooms of the persons who apparently have accompanied patients to the clinic. Such observations may be valuable in the ensuing epidemiologic exploration.

Two examining rooms, one for male and one for female patients, reduce the amount of clinic time for each patient since the physician performing the examinations can move from one room to another. Preliminary arrangements must be made so that an ample supply of drugs and other miscellaneous clinic materials, including medical and epidemiologic record forms, are on hand.

Two days before the first scheduled clinic, a team, usually comprised of two to six health program representatives who are well trained and experienced in the method of epidemiologic investigation for venereal disease, fans out from the area health department to the assigned sections of the community which are to be blitzed. Their primary functions, which for the most part are determined by the preliminary surveillance factors, usually include:

1. Requesting permission from private physicians to interview all patients with recently reported cases of syphilis.
2. Interviewing all persons with recently reported cases to elicit names of contacts and suspects, whether cases were reported by public agencies or private physicians.
3. Tracing all named contacts and referring them for examination to the physicians of their choice or to the respective health department.

4. Referring all persons in the community with recent reactive serologic tests for syphilis to their physicians or health departments.

5. Visiting private physicians to determine if they have treated persons for syphilis whom they have not reported to the health department.

Visits to private physicians help spread the epidemiologic net to cases which might otherwise be overlooked. More important, such visits provide each physician in the community with information about all aspects of the blitz and serve as a means of enlisting his support.

The success of an intensive campaign on syphilis depends upon the persuasiveness of the personnel. Some effective approaches used in discussing the Alabama campaigns or in referring persons for examination include comments on these subjects:

1. The current extent of syphilis in the community.

2. The procedures in force to safeguard confidential information and preserve the patient's status in his family, socially, at work, and in the community.

3. The fact that a medical specialist in syphilology conducts the clinic and is available to local physicians for consultation.

4. The seriousness of syphilis, its possible debilitating effects, and the urgency for curative or preventive therapy.

5. The arrangement of special clinic hours for persons who cannot attend during regular hours. (Clinics are held in the evenings and on Saturdays and Sundays.)

Within the clinic, the identity of each person to be examined is confirmed, a medical record is prepared, blood is drawn for an immediate RPR (rapid plasma reagin) card test and for a VDRL (Venereal Disease Research Laboratories) serologic test for syphilis. For the clinician's benefit, the following information is recorded on the clinic records: the RPR card test results, the person's date

of exposure to syphilis, and the diagnosis of the person to whom the contact was allegedly exposed.

Each person to be examined undresses completely; nurses are continually in attendance for female patients. Physical checking is always done in this order: hair (any wig is removed to determine whether patient evidences alopecia areata), gums, mouth, throat, all lymph areas, skin (including palms of the hands and soles of the feet), genitalia, and rectum. Any suspicious lesions are examined by darkfield microscopy. When new infections are discovered upon examination, the infected persons are interviewed to elicit names of contacts and suspects. The clinician urges the patients to name all their contacts, reemphasizing that such information is treated confidentially. Most of the infected are treated with 2.4 million units of benzathine penicillin G. Contacts whose clinical and serologic test results are negative but who have been exposed to an infectious person within that person's period of infectivity are advised to accept 2.4 million units of penicillin G as preventive treatment. An alternate antibiotic is available for persons for whom penicillin is contraindicated.

All contacts named are interviewed to take advantage of their knowledge about persons in their social group who may have suspicious lesions or who may be having sexual contact with other persons in the community known to have syphilis. (This tracing of infectious syphilis through a patient's or his contacts' associates is the well-known cluster procedure). Persons with a new infection are given an appointment to meet with the public health representative in 5 days for a re-interview.

At the end of each examination, the clinician completes a medical record and morbidity report. The public health representative completes all epidemiologic records at the end of each interview with an infected person or a named contact. Every attempt is made to trace and refer for examination within 24 hours all the named contacts and

(Continued on Page 511)

It works.

SUMMARY:

TREST[®] (METHIXENE HYDROCHLORIDE)
relieves G.I. spasm, hyperactivity
and associated pain by directly
antagonizing the parasympathetic
nervous system.

Each tablet contains methixene hydrochloride, 1 mg.

INDICATIONS: Gastrointestinal Spasm and Hypermotility.

CONTRAINDICATIONS: Pyloric obstruction, gastric retention, obstructive organic disease of the gastrointestinal tract, organic cardiospasm, duodenal stenosis, stenosing peptic ulcer, and urinary bladder neck obstruction or prostatic hypertrophy are contraindications to the use of this drug.

WARNING: Overdosage produces anticholinergic side effects. Although the animal reproduction studies are negative, until there is clinical confirmation of safety in pregnancy, this product should not be used in women who may become pregnant unless in the opinion of the physician the benefits outweigh the risks.

PRECAUTIONS: Use only with caution in patients with certain types of cardiovascular disease, since anticholinergic drugs may cause arrhythmias. Extensive clinical studies of TREST have shown no evidence of glaucoma. However, the possibility exists that it can occur since it has been reported as a characteristic side effect of anticholinergic drugs. This product does not replace definitive treatment in organic gastrointestinal disease.

SIDE EFFECTS: Side effects are generally absent when TREST is used in the recommended dosage of 1 to 2 mg. three times daily. Uncommonly, allergy or sensitivity to the drug may be manifested by generalized rash or widespread desquamation. In case of prolonged or massive overdosage, dry mouth, blurred vision, and urinary retention, typical side effects common to anticholinergic drugs, may occur. Occasionally, sensitive patients may notice mild dryness of mouth or slight blurring of vision from doses of 2 mg. or more. Most patients tolerate single doses of 5 mg. without such side effects.

DOSAGE: The usual adult dosage is 1 mg. by mouth three times daily. If necessary, the dose may be increased to 2 mg. three times daily. Pediatric dosage has not been determined.

CAUTION: Federal law prohibits dispensing without prescription.

Puts the G.I. tract to rest

DORSEY LABORATORIES • a division of The Wander Company • Lincoln, Nebraska

An antispasmodic that antagonizes.

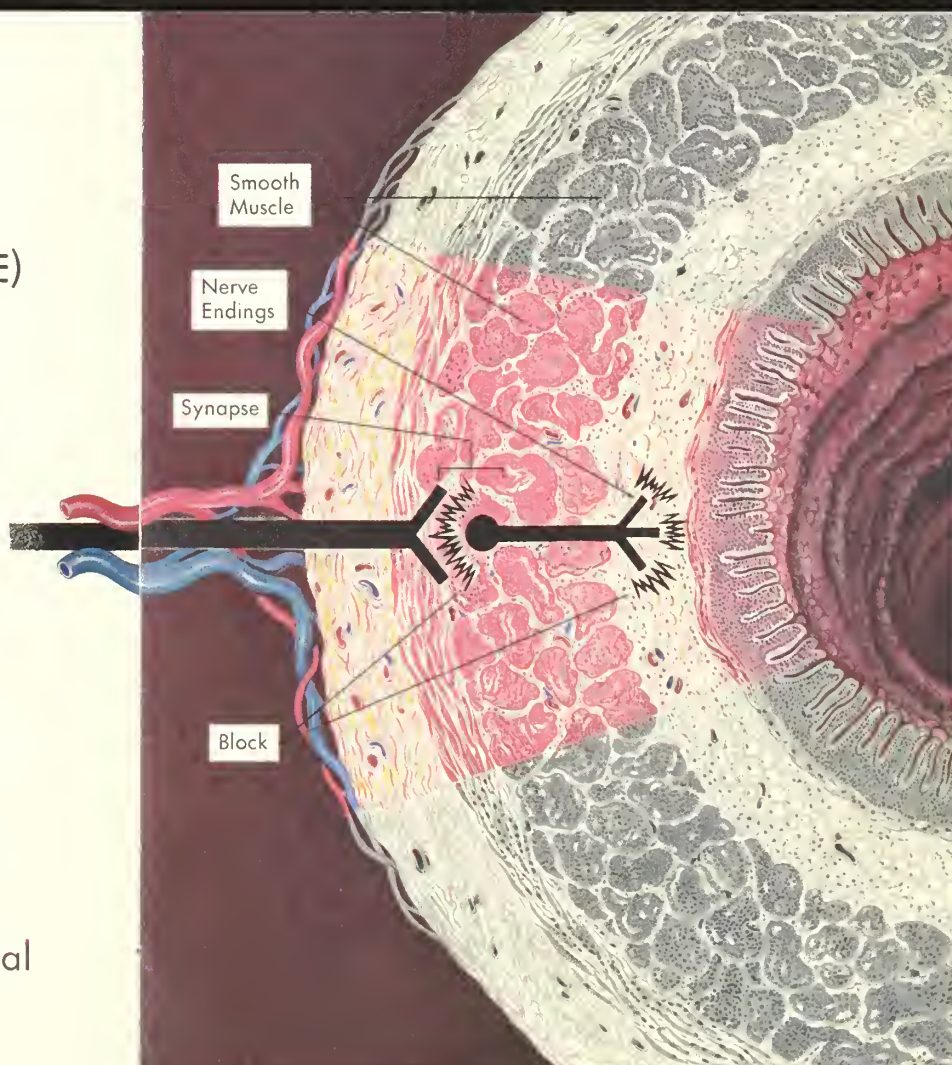
How TREST[®] (METHIXENE HYDROCHLORIDE) works.

parasympathetic nerve

TREST (methixene hydrochloride) directly antagonizes the parasympathetic nervous system.

TREST (methixene hydrochloride) blocks the action of acetylcholine formed at the synapses and visceral parasympathetic nerve endings.

Therefore, nerve impulses are prevented from reaching the smooth muscle layer.



(Continued from Page 509)

all the suspects residing in the blitz area. The idea is to uncover every case of syphilis in the given community within a very short period by mounting a concerted, organized epidemiologic attack.

Results

By the end of August 1965, the Department of Public Health of Alabama had conducted blitzes on syphilis in five different areas of the State. In these blitzes, 739 contacts of 196 initial patients with primary, secondary, or early latent syphilis were examined (table 1). These contacts yielded 68 primary, 33 secondary, and 12 early latent cases. Approximately two-thirds of the contacts were examined within 24 hours.

Syphilis was diagnosed in the primary stage in 60 per cent of the 93 women with clinical evidence of the disease (table 2). In the Alabama statewide program in fiscal 1965, syphilis in the primary stage was diag-

Table 2. Initial cases of syphilis reported during five blitzes in Alabama, by stage of disease and sex of patients, April-August 1965.

Stage of disease	Men	Women	Both sexes
Primary	51	56	107
Secondary	26	37	63
Early latent	12	14	26
Total	89	107	196

gram primary syphilis was diagnosed in 59 per cent of the men with clinical manifestations.

The significant relationship between the rapid examination of female contacts and the unusually high proportion of cases diagnosed in the primary stage in women demands further investigation. In Alabama, there is markedly less spread of syphilis by persons in the primary stage of the disease than by those in the secondary stage (table 3).

During the five blitzes, a total of 242 male and female contacts, or 81 per cent of the

Table 1. Initial cases of syphilis reported in five blitzes in Alabama, by area and length of blitz, April-August 1965.

Geographic area (county and principal city)	Population	Length of blitz (days)	Cases				
			Total	Primary	Secondary	Early latent	Per 100,000 population
Montgomery (Montgomery)	155,700	8	66	41	13	12	42.4
Etowah (Gadsden)	76,800	4	44	27	15	2	57.3
Escambia (Atmore)	17,500	3	18	11	6	1	102.9
Morgan (Decatur) and Limestone (Athens)	53,100	9	56	20	25	11	105.5
Covington (Andalusia)	18,400	2	12	8	4	0	65.2
All areas	321,500	26	196	107	63	26	61.0

nosed in 37 per cent of the women with clinical manifestations. For men, the difference in the proportion of clinical cases diagnosed in the primary stage in these two efforts was not statistically significant. During the five blitzes, syphilis in the primary stage was diagnosed in 66 per cent of the 77 men with clinical evidence of the disease, while during fiscal 1965 in the Alabama statewide pro-

contacts who had been exposed within the 4 months preceding their examinations, were epidemiologically treated (table 4).

Of 58 additional contacts who were exposed during the last 4 months of the blitzes but had not been treated by the end of these campaigns, 40 were located and subsequently

(Continued on Page 513)

Evidence that TREST® (METHIXENE HYDROCHLORIDE) works.

EFFECTIVENESS AND SAFETY

t.i.d. dosage in milligrams

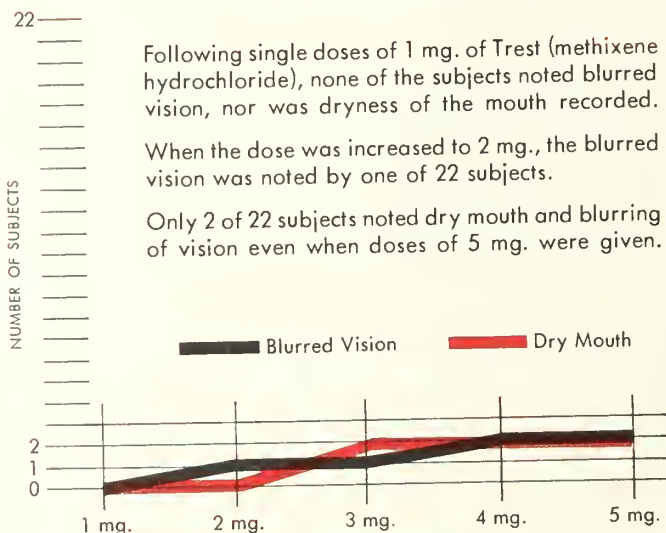
1 mg. symptomatic relief

2 mg. upper recommended clinical dose/greater pharmacologic activity and symptomatic relief/side effects uncommon

10 mg.

Studies with 372 subjects revealed no adverse effect upon vital organs when dosage was increased 10 times the normally effective dose of 1 mg. t.i.d. for periods up to 2½ years of continued administration.

LACK OF SIDE EFFECTS



Conclusion: Typical atropine-like side effects are not expected when Trest is used 1 mg. t.i.d. These effects are uncommon when the dosage is increased to 2 mg. t.i.d.

"A highly satisfactory symptomatic response was obtained in 20 of the 23 patients who took 1 mg. of methixene hydrochloride (Trest) by mouth three times daily. No side effects occurred at this dosage during administration of the medication itself.

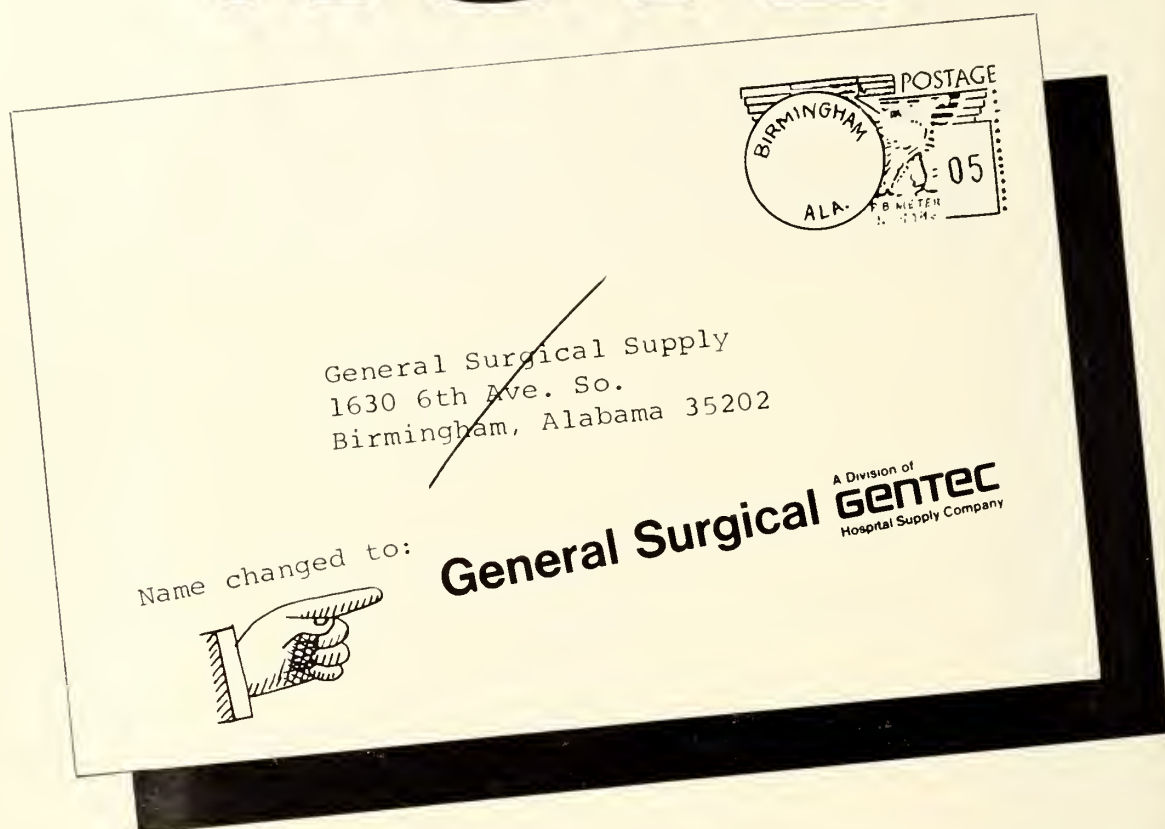
"Methixene hydrochloride (Trest) provides highly gratifying symptomatic relief in a variety of conditions associated with gastrointestinal motility without producing the usual atropine-like side effects and without requiring concurrent barbiturate sedation."

—Martins, J. K.:
Clin. Med. 72:1313-1316
(Aug.) 1965.

"... in a series of 47 patients suffering from various types of functional bowel distress. The superiority of this drug (Trest) in dosage of 1.0 mg. three times daily by mouth over the placebo is statistically significant. At that dosage level, side effects were not observed."

—Hufford, A. R.:
Clin. Med. 72:1151-1155
(July) 1965.

NOTE:



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(Continued from Page 511)

examined. The health officer or private physician elected to follow these 40 contacts serologically for 90 days. Also, 112 contacts who had been exposed more than 4 months earlier were examined, but no therapy was given if the results of the clinic examination and serologic tests were negative.

Only 19 persons, or 7.8 per cent of 242 contacts, had a history of sensitivity to penicillin and were treated with an alternate antibiotic—erythromycin estolate orally for 20 days.

Ninety-one per cent of the contacts of persons with primary or secondary syphilis were brought to examination. Of the 647 contacts examined, 14.7 per cent were brought to treatment. The number of contacts brought to treatment for syphilis per 100 interviewed patients with primary or secondary cases was 56 in the primary or secondary stage and 6 in the early latent stage. In addition, five cluster suspects were brought to treatment in the primary or secondary stage. Of 170 persons with primary and secondary cases, no source or contact to whom the interviewed patient had spread the disease was identified.

Of the 26 patients with early latent cases who were interviewed, 6 contacts with primary or secondary syphilis and 1 contact with syphilis in the early latent stage were brought to treatment. One cluster suspect whose name was elicited from a patient with an early latent case was also brought to

Table 3. Spread of syphilis according to stage of the infector's disease, Alabama, fiscal year 1965.

Stage of syphilis	Cases diagnosed among—		Cases spread per 100 interviewed patients	Cases with no known source or spread
	Interviewed patients (infectors)	Contacts of interviewed patients		
Primary	456	231	51	43
Secondary	466	351	75	50
Early latent (under 1 year)	317	276	87	43

Table 4. Epidemiologic results achieved with contacts named by 196 patients with syphilis during five blitzes in Alabama, by diagnosis of the interviewed patient, April-August 1965.

Epidemiologic status of contacts	Number infected by patients with diagnosis of—			
	Primary or secondary syphilis	Early latent syphilis (under 1 year)	Total number	Per-cent ¹
Examined	647	92	739	100.0
Brought to treatment	95	7	102	13.8
Syphilis diagnosis—				
Primary	64	4	68	266.7
Secondary	31	2	33	232.3
Early latent	0	1	1	21.0
Previously treated	183	30	213	28.8
Exposed within the 4 months preceding examination	266	33	299	40.5
Treated epidemiologically	213	29	242	380.9

¹Per cent of the 739 examined contacts unless otherwise noted.

²Per cent of the 102 contacts brought to treatment.

³Per cent of the 299 contacts exposed within the 4 months preceding examination.

treatment for primary syphilis.

Each of the five blitzes required one clinician, one nurse, one clinic supervisor, and a team of two to six interviewer-investigators. The five blitzes took 26 days, ranging from 2 to 9 days each.

Blitzing a Prison

The disease eradication procedure described was used also in 1965 with a captive population—1,076 inmates of a prison. Syphilis had occurred sporadically among the prisoners for several years, but epidemiologic procedures had not been productive because the infected tended to name contacts in the prison whose cases had been previously diagnosed and treated. Yet syphilis cases were occasionally diagnosed at the prison clinic. All inmates are serologically tested upon admission to this maximum-security facility, and treat-

(Continued on Page 518)





*Well, Doctor Cunningham, I was just telling Herbert I should
talk to you about my cough. It comes from down here and...*

...coughs are the symptom recital may prove to be as difficult to control as the cough.
...is the useless, exhausting type of cough that often accompanies respiratory infection or
...ergy, you can provide prompt relief with Novahistine DH. Its decongestant-antitussive
...on controls frequency and intensity of cough spasms without abolishing cough reflex.
...the fresh, grape flavor of Novahistine DH appeals to children and adults alike.
...en your diagnosis is bronchitis, complicated by thick tenacious exudates, Novahistine
...pectorant is particularly useful. It not only provides decongestive action and controls
...cough, but also encourages expectoration, thus easing bronchial obstruction.
...s with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism
...rinary retention. Ambulatory patients should be advised that drowsiness may result.
...oninuous dosage over an extended period is contraindicated since codeine phosphate
...a cause addiction.

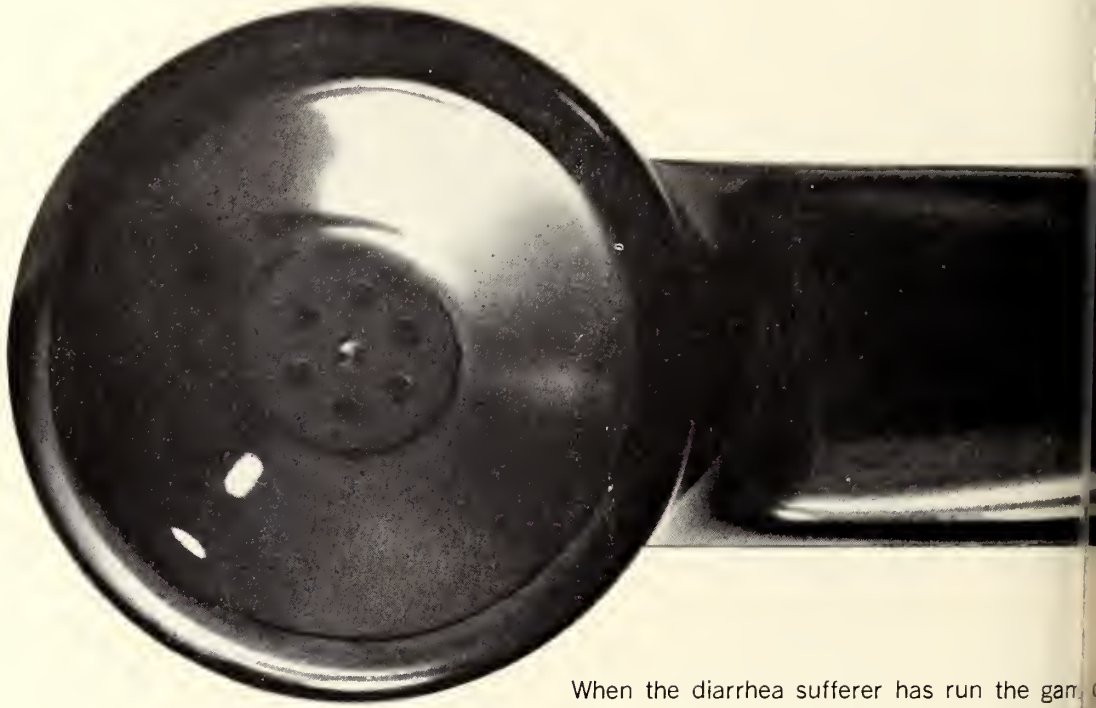
...a 5 ml. teaspoonful of Novahistine DH contains codeine phosphate, 10 mg. (Warning:
...a be habit forming); phenylephrine hydrochloride, 10 mg.; chlorpheniramine maleate,
...mg.; chloroform (approx.), 13.5 mg.; l-menthol, 1 mg. (Alcohol 5%). Each 5 ml. of
...ohistine Expectorant contains the above ingredients and, in addition, glyceryl
...uacolate, 100 mg.

NOVAHISTINE[®] DH NOVAHISTINE[®] EXPECTORANT



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis

When uncontrolled diarrhea brings a call for help



When the diarrhea sufferer has run the gamut of home remedies without success, pleasant-tasting CREMOMYCIN can answer the call for help. It can be counted on to consolidate fluid stools, soothe intestinal inflammation, inhibit enteric pathogens and detoxify putrefactive materials — usually within a few hours.

CREMOMYCIN combines the bacteriostatic agents succinylsulfathiazole and neomycin, with the adsorbent and protective demulcents, kaolin and pectin, for comprehensive control of diarrhea.

INDICATIONS: Diarrhea.

CONTRAINDICATIONS: Do not use in intestinal obstructive ulceration of bowel, or diverticulosis; in hypersensitivity to sulfonamides or neomycin; in pregnancy at term, in premature infants, or during first week of life in the newborn.

WARNINGS: Use only after critical appraisal in patients with hepatic or renal damage, urinary obstruction, or blood dyscrasias. Fatal hypersensitivity reactions and blood dyscrasias reported with use of sulfonamides. Consider periodic blood hepatic and renal function tests during intermittent or prolonged use.

PRECAUTIONS: *Succinylsulfathiazole:* Use with caution in patients with history of significant allergies and/or asthma. Continued use requires supplementary vitamins B₁ and K. *Neomycin:* W



like neuromuscular block during anesthesia if neomycin is preoperatively in large doses when renal function is at risk for overgrowth of nonsusceptible organisms. Possibility of ototoxicity and nephrotoxicity with prolonged usage.

EFFECTS: As with all sulfonamides: Headache, malaise, anorexia, G.I. symptoms, hepatitis, pancreatitis, blood dyscrasias, rash, drug fever, rash, conjunctival and scleral injection, purpura, hematuria, and crystalluria have been noted. Decreased fecal output of thiamine and decreased synthesis of vitamin K have been reported. *Neomycin:* Nausea, loose stools.

When prescribing or administering, read package circular with instructions or available on request.

promptly relieves diarrheal distress

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ne today's theory is tomorrow's therapy

(Continued from Page 513)

ment is provided when indicated. Therefore any single or sporadic occurrence of cases almost certainly results from persons incubating syphilis and subsequently developing and spreading the disease after admission.

In early 1965, the blood specimens of a number of prisoners reacted positively in tests for syphilis and showed high dilutions. When subsequently six primary cases and one secondary case were diagnosed at the prison clinic, the staff of the Alabama Department of Health decided on June 9, 1965, to blitz on the following day. On June 10, 1965, the department therefore dispatched a team consisting of one physician and six investigators to the prison.

During the next 2½ days, 82 cases of infectious syphilis were diagnosed and the patients treated; 209 contacts were epidemiologically treated. The 82 cases represented an alarming epidemic attack rate of 7.6 per cent (fig. 3). During the succeeding 1½ days, the remaining 785 prisoners were prophylactically treated, and each was given either the penicillin treatment or treated with the alternate antibiotic.

Since 3 per cent of the 1,076 prisoners treated had a history of sensitivity to penicillin, they were given erythromycin estolate. Of the 1,040 prisoners treated with benzathine penicillin G, 3 of them, or 0.3 per cent, experienced minor reactions.

The prison authorities plan to continue examining each newly admitted prisoner for syphilis and have agreed to administer 2.4 million units of benzathine penicillin G or an alternate antibiotic even if the serologic test for syphilis is nonreactive. These procedures will be applied to any prisoners coming in for the first time as well as to prisoners who have used a temporary pass to leave the prison. If the prisoner cannot be treated at the moment of entry, he will be placed in isolation until treatment can be given.

During the year following the blitz, not one case of syphilis was diagnosed in the prison.

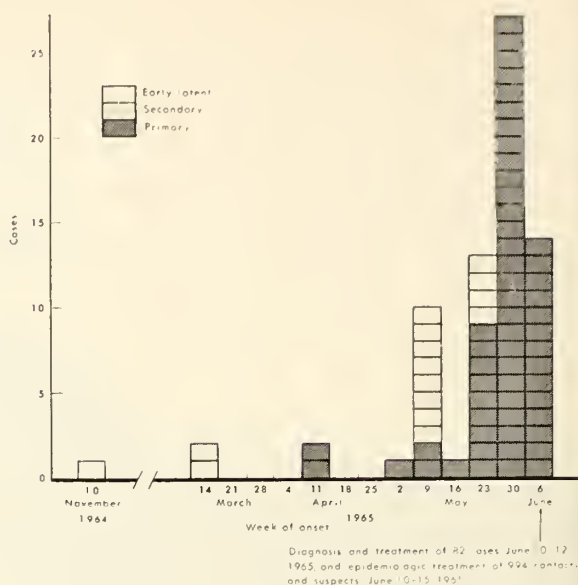


Figure 3. Infectious syphilis epidemic in an Alabama prison population during fiscal year 1965.

Intensive attacks on syphilis, such as the blitzes in Alabama, provide an opportunity to reduce the spread of the disease within a community and ultimately to control and eradicate it.

Summary

In five blitzes on syphilis, the Alabama Department of Public Health brought a significant number of persons, particularly women, to treatment in the primary stage of the disease. In these campaigns, conducted from April through August 1965, syphilis was diagnosed in the primary stage in 60 per cent of the women with clinical evidence of the disease. In the Alabama statewide program during fiscal 1965, cases were diagnosed in the primary stage in only 37 per cent of the women with clinical manifestations. Alabama data for fiscal 1965 indicate that in the primary stage spread of the disease to others is markedly less than in the secondary stage.

The blitz procedure in syphilis control is an intensive attack on the disease in which efforts are directed at rapid examination and treatment of all named contacts of inter-

viewed patients with syphilis. During the Alabama blitzes, approximately two-thirds of the contacts were examined within 24 hours and 91 per cent of the contacts of persons with primary or secondary syphilis were brought to treatment.

Epidemiologic treatment (2.4 million units of benzathine penicillin G or an alternate antibiotic) was urged upon all contacts whose initial clinical examination and serologic test results were negative but who had been exposed to a person with infectious syphilis

within the previous 4 months.

When six cases of syphilis were diagnosed in 1965 among inmates at a maximum-security prison, the health department staff also conducted a blitz there. Within 2½ days, 82 cases were diagnosed (an attack rate of 7.6 per cent) and the patients treated; 209 contacts were epidemiologically treated. The remaining 785 prisoners were also given penicillin or an alternate antibiotic. Not one case of syphilis was diagnosed in the prison during the year after the blitz.

Alcoholism Recognized As A Disease

CHICAGO—Recent court decisions recognizing that alcoholism is a disease, not a crime, are in agreement with a position adopted by the American Medical Association ten years ago and reaffirmed in 1962, says an editorial in the August 15 *Journal of the American Medical Association*.

As a result of the court decisions, the medical profession faces increasing responsibility for "a wide range of alcoholic problems previously left primarily to law enforcement agencies," said the *Journal* editorial.

The statement was approved by the AMA's Committee on Alcoholism and Addiction and the AMA Council on Mental Health.

The most immediate task, the editorial said, is to develop guidelines for diagnosing alcoholism "which are as clear and precise as possible and which satisfy both medical and legal definitions."

A second obligation of the medical profession is to "foster the admission of alcoholics to those general hospitals that do not now admit such patients" and to establish detoxification units closely affiliated with established, long-term treatment centers and associated agencies.

"Next, we (physicians) should play an important role, not only in the education of many members of our own profession, but also in educating police and other concerned groups about issues of acute and chronic alcoholic infirmities."

Finally, physicians should integrate their specialized skills on an equal basis with other professions "in those long-term endeavors (of alcoholic management) in which purely psychiatric or other medical factors are not predominant," the statement said.

In two recent decisions, courts in North Carolina and the District of Columbia recognized alcoholism as a disease, and defined frequent public appearance in an intoxicated state as a symptom of alcoholism, not a criminal offense.

The decisions in the Driver case in the Fourth Circuit Court in North Carolina and the Easter case in the Circuit Court for the District of Columbia are "important landmarks," the *Journal* editorial said.

"These decisions do not negate statutes punishing ordinary public drunkenness; neither do they deal with the . . . culpability of persons carrying out unlawful and antisocial acts while under the influence of alcohol.

"They do portend, however, the end of the time-worn practice of meeting the problems of public drunkenness . . . of chronic alcoholic persons primarily by incarcerating them as criminals," the editorial said.

The extent to which physicians assist the alcoholic in obtaining proper medical care and other help "will be a measure of our response to the challenge implicit in these decisions," said the editorial.

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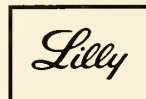
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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

November, 1966

No. 5

Progress in Cancer Research and Control*

by

John R. Heller, M. D.

Special Consultant for International Programs, National Cancer Institute¹

Progress in cancer research and control can be expressed in varying ways. Statistically, for example, progress means 1 in 3 cancer patients are being saved today, as compared to fewer than 1 in 5, 30 years ago. About 190,000 of the 500,000 new cases diagnosed in this country each year will eventually join the ranks of the more than 1.5 million Americans who are now living without evidence of their disease 5 years after diagnosis and treatment.

Or progress can be measured in terms of basic knowledge: the bits of information we have accumulated on how a normal cell may be converted to a malignant one or how a malignant cell can be destroyed without harm to normal ones.

But more and more frequently, progress in cancer research finds expression in limited but real gains scored against specific forms

of the disease. These gains may be the result of the development of better methods of treatment, or discovery of a cause, or refinement of a means for detecting the disease in an early, more treatable stage. Thus, at present, control is possible—not of cancer in general, but control of leukemia, control of lung cancer, and control of cancer of the uterus, for example.

For the general public and for the physician, this makes a lot of sense. To most of us, the problem of cancer has deepest meaning when applied to experiences of a personal or professional nature: a sister dying of breast cancer; a young patient miraculously alive months after a diagnosis of leukemia; or a neighbor "hanging on" as his lung cancer casts a longer and longer shadow over a formerly vigorous life.

This morning I would like to review with you some of the latest results of cancer research and the opportunities that exist for control of some forms of the disease.

Leukemia

Progress in the treatment of leukemia has been most encouraging. For a number of years it has been known that six drugs,

*For presentation at Sixth Annual Meeting of Alabama Chapter of the American Academy of General Practice, Birmingham, Alabama, July 20, 1966.

¹National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare.

given individually, can restore acute leukemia patients to good health temporarily. Now, as you may have been reading, studies have shown that two or more of these drugs, used in combination, apparently interact and are more effective than when used singly. In many hospitals cooperating in the National Cancer Institute's Chemotherapy Program, investigations are under way to determine what combinations of drugs and in what amounts give best results in the majority of patients.

Intensive combination drug therapy has apparently greatly increased the fraction of cells killed in some patients. Two children participating in a small NCI combination-drug study (vincristine, prednisone, 6-mercaptopurine, and methotrexate) have been free of any signs of leukemia for 3 years. In a very recent Institute study, children with acute leukemia treated with high doses of four anticancer drugs (vincristine, prednisone, 6-mercaptopurine, and methotrexate) intermittently over a 15-month period achieved initial remission twice as long as those reported in earlier studies. This has usually been achieved, too, without incurring drug resistance, as evidenced by the fact that 80 per cent of those who relapsed were brought into a second remission by further therapy with the same four drugs.

Before present procedures of therapy came into use, about 50 per cent of children with acute leukemia survived just 4 months, and only 10 per cent survived as long as a year. With improvement in treatment, about 90 per cent of patients enter remission, and an increasing percentage survive two years.

A registry established under the auspices of the National Cancer Institute's Acute Leukemia Task Force lists patients surviving more than five years after diagnosis. In a period of two years it has been possible to collect information on well over 100 such patients. The patients have been listed by hematologists in this country and abroad, and it is not known what fraction of the total number of 5-year survivors this represents.

Of the first 101 patients listed as survivors of five to 14 years' duration, 64 had no sign of disease.

Since laboratory studies have shown that one leukemic cell in a mouse's body may multiply and bring on a fatal stage of the disease, scientists have been investigating the possibility that the same situation exists for humans. They have made estimates of how many leukemic cells are in a sick child at relapse or before treatment, how often the leukemic cells double in number, and what fraction of cancerous cells are killed by each anti-leukemic drug. They are hoping this information will be useful in determining dosages and regimens most likely to bring about long-lasting remissions.

As you know, drug effects and the disease process itself often result in fatal hemorrhage or infections in acute leukemia patients. It has long been recognized that transfusions of blood platelets are effective in preventing and controlling hemorrhage, but the need for large numbers of platelets and the necessity for using them within a few hours after removal from a donor have seriously limited their use. Adaptation of a plasmapheresis technique has greatly increased the available supply of fresh platelets for transfusion. Now platelets and plasma can be removed from the blood and the red cells returned to the donor in one continuous operation, which takes only one to two hours. Donors are able to give platelets as often as twice a week for periods up to 3 months and a single adult donor, often a parent, can provide the major portion of platelets required by a leukemic child.

Results of platelet transfusions have been so dramatic that acute leukemia patients treated at the National Cancer Institute are now given these transfusions as a preventive measure whenever their platelet counts fall to dangerously low levels. During the past year, the Institute expanded its platelet transfusion programs at seven cooperating leukemia treatment centers and plans are in progress to extend facilities for such transfusions to 24 additional centers.

Prevention of serious infection in leukemia patients is being investigated in studies of methods of germfree isolation. Patients are isolated in controlled environment units, in which the bacterial and fungal populations are greatly reduced. In addition, a test of white-cell replacement for treatment of infection in acute leukemia patients has been undertaken. In an initial trial of granulocyte replacement at the National Cancer Institute, *Pseudomonas* septicemia was cured in 6 of 10 acute leukemia patients. To achieve this result, doses ranging from 10 to 100 billion granulocytes were required.

Because adequate numbers of granulocytes cannot be obtained from normal donors by available techniques, another source had to be found for this initial trial. That source was patients with chronic myelogenous leukemia, whose levels of granulocytes in the circulating blood are very high, as you know. Most of the leukemic granulocytes in these patients are mature, unless disease is far advanced, and, unlike the immature cells in acute leukemia, can combat infection-causing organisms.

The problem of obtaining granulocytes in quantity from normal donors has prompted the National Cancer Institute to sponsor the development of a continuous flow blood-cell separator. When the machine is fully developed it is expected to draw a donor's blood, remove white cells, and return the other elements to the donor. The blood will flow in a closed system from a vein in one arm of the donor, through the separator, to a vein in the other arm. In principle, this procedure should make it possible to obtain from the blood of a single donor the granulocytes needed for one transfusion. At present more than 30 normal donors are required to obtain an adequate number of granulocytes.

Hand in hand with studies such as these to improve the treatment of leukemia have been investigations of its causes. Since strong evidence exists that leukemia in many species of laboratory animals—mice, rats, chickens, for example—is caused by viruses, the search is on for a virus or viruses that may cause

the disease in man. Particles resembling animal leukemia viruses have been seen in electron microscopic studies of human leukemic tissues.

Two years ago the National Cancer Institute established a Special Virus-Leukemia Program whose major goals are identification of a human leukemia virus and subsequent development of a vaccine or other method of preventing or controlling the disease. Through studies carried out under this Program, encouraging progress has been made within the past year in the detection, isolation, characterization, and growth of new viruses recovered from patients with leukemia and Burkitt lymphoma, a related type of cancer most frequently involving the jaw and seen primarily in African children.

Since climate and other environmental factors seem to indicate that Burkitt's lymphoma is likely caused by a virus, the National Cancer Institute is establishing close working liaisons with several key scientists and physicians in Africa to intensify studies of this disease. Arrangements are being made for American scientists to spend a year in Africa lecturing to medical students, obtaining clinical specimens for studies in the National Cancer Institute's laboratories, and setting up a controlled statistical study. The establishment of such a survey is of utmost importance, because certain regions of the Burkitt lymphoma area may be used in field trials of a candidate vaccine.

Many attempts are being made to transmit human leukemia to laboratory animals, and preliminary evidence is available of multiplications in hamsters of a virus from the Burkitt tumor. Characteristic virus particles similar in size and appearance to those present in human leukemic tissues have also been observed in two out of ten marmosets inoculated with material from a child with lymphoma.

For some time scientists have been working on methods for producing effective vaccines for mouse leukemia, as prototypes for a human vaccine should human leukemia one day prove to be caused by viruses. Also,

recent study has shown that serum collected from vaccinated mice is useful, in combination with drugs, in treating mouse leukemia. This finding suggests that one day human leukemia may, in a similar manner, be more effectively controlled through treatment with drugs in combination with antiserum prepared against viruses that may be isolated in human virus-leukemia studies.

Cancer of the Lung

Progress in treating cancer of the lung has not been as dramatic as has progress in treating leukemia. But here we have a form of cancer where, theoretically, the majority of cases are preventable. Both laboratory and statistical evidence have indicated, to the satisfaction of most scientists that cigarette smoking far outweighs all other factors as a cause of lung cancer, and a number of studies have shown that stopping smoking, at any age, decreases one's chances of having lung cancer.

Fifty years ago lung cancer was a rare disease. Today, among American men, it is the most common cause of death from cancer. In 1966, in the United States, 42,000 men and 8,000 women will die of this disease.

A clear understanding of how smoking causes lung cancer would be of tremendous help in the development of effective means for preventing many cases of lung cancer. Extensive laboratory studies of the effects of tobacco products on health are being conducted by the National Cancer Institute in close cooperation with the U. S. Department of Agriculture.

Attempts are being made, for example, to isolate and identify carcinogenic and co-carcinogenic compounds, other than the well known polycyclic aromatic hydrocarbons, from tobacco and tobacco smoke. Also, changes in the tracheo-bronchial tree of laboratory animals exposed to cigarette smoke are being studied to determine how the smoke changes the physical properties of mucus, slows down its flow, and interferes with the sweeping movements of the cilia.

Other studies are investigating the cancer-causing effects of multiple factors; rats are being subjected to lung-damaging effects of a fluorocarbon and then exposed for at least a year to chemical aerosols of nickel-containing dust, ozonized gasoline, and tobacco smoke—a mixture that approximates that breathed by man in an urban environment.

In addition, the National Clearinghouse on Smoking and Health, established by the Surgeon General of the Public Health Service shortly after the 1964 report of his special advisory committee, is making available to different age groups information materials on research findings. A recently announced Public Health Service educational campaign is focusing on boys and girls in the late elementary grades in hopes of dissuading from smoking some of those who will, otherwise, grow up to become a part of that 50 per cent of the high school population now identified as regular cigarette smokers and likely candidates for lung cancer.

Cancer of the Uterus

Research progress has provided a means for controlling the third most deadly form of cancer in women—cancer of the uterus. In the last 25 years, the death rate from uterine cancer has dropped almost 50 per cent among white women and possibly 40 per cent among Negro women, in whom the rate of occurrence is twice as high. Data gathered in the End Results Program of the National Cancer Institute showed that most of the improvement in survival has occurred in patients with localized disease and that better than three out of four patients whose disease is localized have a chance of surviving five years or longer.

Undoubtedly, a large part of this improvement in survival is due to increasingly widespread use of the "Pap" smear technique for detecting symptomless cancer of the cervix where most cases of cancer of the uterus occur. The probability of still further reducing the mortality rate by using the "Pap" smear to screen high-risk groups of women was suggested by results of a recently re-

ported study. In nine years of community-wide testing for uterine cervical cancer among women in Louisville and Jefferson County, Kentucky, more than 413,000 "Pap" smears were examined. The number of new cases of invasive cancer found for each 100,000 women ranged from 25 for the highest socioeconomic area to 63 for the lowest income area. Furthermore, as the study progressed, more cases were found in early stages of the disease. The conclusion that could be drawn from these research findings was that priority should be given to cytologic examination of underprivileged women, whose high risk of cervical cancer is associated with such factors as early marriage, early pregnancy, and levels of income that may not provide adequate medical care following childbirth.

An attempt to further reduce deaths from uterine cancer is being made by the Public Health Service which, as you may know, has just launched a nationwide, grant-supported program to provide the "Pap" test to more than eight million American women over age 25 who are admitted to hospitals each year for any reason. The PHS expects to achieve this goal within the next five years, with the number of hospitals providing this service increasing each year during this period. Hospitals providing care for the poor and medically indigent are receiving first consideration in the awarding of grants.

Breast Cancer

In the hope that detection of breast cancer at an early stage will bring about as dramatic an improvement in survival as has early detection of uterine cancer, research efforts have been focusing on the development of a means for ferreting out symptomless cases of this most common single type of cancer in women in the United States.

Extensive studies of mammography, or examination of the breast by soft X-ray, are under way. The National Cancer Institute is administering a long-term research contract for application of this technique to 30,000 apparently healthy women between the ages of 40 and 64, to determine whether

detection of suspicious masses before they can be felt by the patient or her physician followed by prompt treatment, will result in increased survival of breast cancer patients.

Reports thus far have indicated that cancers not detectable by clinical means are being revealed. By the end of March 1965, 15,500 women had been asked to appear for examination; nearly 10,000 had been examined, and about 200 recommended for biopsy to establish a diagnosis. In the screening group, a rate of detection of 2.3 cancers per 1,000 women was observed; in the control group, the rate was 1.4. Confirmation of the preliminary findings will depend on long-term continuation of the study.

Studies of a newer technique, infrared thermography, are in very early stages. Observations have indicated that most breast cancers are associated with increased surface temperature and that the degree of increase is related to the outlook for survival of the patient. This characteristic is the basis for thermography, which utilizes small heat-sensitive devices and infrared camera to record areas of elevated skin temperature.

The two methods, X-ray mammography and thermography, measure different characteristics of the breast. Both require much more research, but it seems reasonable to anticipate that eventually both will find a place in diagnostic and possibly, preventive, approaches to the control of breast cancer.

Rehabilitation of the Cancer Patient

The nature of cancer is such that the physician's immediate concern is, naturally, to eradicate the disease before it can take the life of its victim; but an important and valid secondary objective of the physician is rehabilitation of the patient.

The American Cancer Society and the Federal Government through its Vocational Rehabilitation Administration have taken an active interest in the rehabilitation of a cancer patient whose daily way of life has been drastically altered by disease or its treatment.

Specific conditions in cancer that most

often warrant rehabilitative efforts are those associated with head and neck cancer, breast cancer, colon and rectum cancer, and cancer of the extremities.

Patients who have had to undergo laryngectomies are of special concern to all head and neck surgeons. The acquirement of artificial speech, such as that produced by an esophageal voice, is often greatly facilitated by the cancer patient's membership in a laryngectomy organization, such as a Lost Chord Club, a New Voice Club, an Anamilo Club, and others. Most of these organizations have now been brought together under the guiding counsel of the International Association of Laryngectomees, sponsored by the American Cancer Society.

The anatomic rehabilitation of a mastectomy patient is rarely a problem today, but the emotional and social rehabilitation of a woman who has undergone radical surgery for breast cancer is an important part of her treatment. If she understands completely why radical surgery was necessary and, at the same time, is assured by those closest to her that loss of a breast is very obviously of little importance compared to loss of her life, a rapid return to her normal activities is usually possible.

The physician plays an important role in preparing a patient for the surgical consequences of a colostomy and in guiding him to a proper understanding of his altered physiology. The realization by the patient that this initially unpleasant physiological limitation can be effectively overcome and is socially inapparent can rapidly bring about a satisfactory emotional rehabilitation.

Restorative planning and effort have been concentrated, almost exclusively, on the "cured cancer patient." However, there are many patients, still with disease in various stages of partial control, who will survive for unknown numbers of years—years which can be made immeasurably more useful and pleasant if the resources of rehabilitation are extended to them. To state the matter simply: today no physician should consider a

patient adequately treated if he is not, at the same time, successfully rehabilitated.

New Research Approaches

Advances in all areas of biomedical science and in health and medical care are continually providing opportunities and setting new goals for progress against cancer.

In the last decade, the availability of special research leads has stimulated the National Cancer Institute to sponsor and coordinate intensive investigation of certain specific human cancer problems.

For example, in 1955 a chemotherapy research program to discover and develop new and more effective anticancer drugs was launched.

In 1958 the Institute began intensive studies of viruses in relation to cancer.

In 1961 a build-up of research on environmental and other causes of cancer was started.

And in 1965 the Special Virus-Leukemia Research Program that I have already mentioned got under way with a special appropriation of \$10 million from Congress.

Possibilities for similar emphasis in other areas of special promise are being continually examined.

Intensive research in the field of immunology is going forward in the hope that techniques used for more than 150 years against a variety of diseases caused by germs and viruses may be applied for protection against cancer. Based on findings stemming from laboratory studies of tumor immunity in animals, scientists are deeply concerned with determining whether the body's immunological defense mechanisms can be directed against malignant disease.

The National Cancer Institute has only recently reorganized its program in cancer chemotherapy for concentration on two principal tasks of highest priority: 1) continuation of the search for new and more effective drugs, and 2) intensification of pharmacolo-

gical research in order to increase the effective use of existing drugs. The substantial increase we have witnessed recently in survival of acute leukemia patients and an acknowledged drug cure of choriocarcinoma have given those working in this program renewed faith in the validity of this approach to the cancer problem. Our experience with these two forms of cancer has also provided convincing evidence that the effectiveness of chemotherapy is directly related to the amount of tumor present when treatment begins. We may not know precisely when "early" is when it comes to cancer, but if every physician were to raise the level of his index of suspicion, perhaps more patients could be brought to treatment when their disease is in a stage most responsive to drugs, radiation, or surgery.

Encouraged by the success of its Acute Leukemia Task Force whose members have been largely responsible for the rapid progress we are witnessing against leukemia, the National Cancer Institute is now setting up three other Task Forces to take the initiative against other forms of cancer.

One group is to attack the perplexing problem of breast cancer, including such unresolved questions as that of the ultimate effectiveness of radical versus simple mastectomy. At present, major objectives and lines of approach are being identified but, eventually, a comprehensive plan will be formulated and specific research projects identified and assigned on a contract basis.

Another Task Force is coordinating research on Hodgkin's disease. Recent achievement of a 40 per cent cure rate in treating localized Hodgkin's disease with radiation suggests the possibility of controlling for long periods a large proportion of cases either with radiation, or with radiation and drugs. Studies exploring the possibility that rapidly progressive Hodgkin's disease is related to a correctable defect in the patient's immune responsiveness are also planned.

The Chronic Leukemia and Multiple Myeloma Task Force has already launched a

major effort to apply the new concepts of chemotherapy to patients with these diseases. Although drug treatment has given many of these patients a more comfortable, useful existence, it has not provided them any extension of life as it has for those with acute leukemia.

Professional Training

Continued progress against cancer requires a constant supply of adequately trained scientists for steady advancement of research and for rapid application of newly acquired knowledge and newly developed techniques to the problem of human cancer.

Concurrently with its increasing emphasis on research related to specific cancer problems in man, the National Cancer Institute has gradually increased its support of post-doctoral training in biomedical disciplines and specialties. The diagnosis and treatment of cancer has become more and more a team function of medical specialists. This concept is supported by the National Cancer Institute's new program for awarding clinical cancer training grants on a competitive basis to schools of medicine and their affiliated teaching hospitals, schools of dentistry and public health, and specialized cancer institutions capable of giving intensive training in cancer management. Thus, our previous focus on training of undergraduate medical students has been broadened to include graduate students, clinical fellows, house officers, and practitioners.

Professional education and training also constitute one of the major objectives of the Regional Medical Programs that are being planned under direction of the National Institutes of Health. This program, resulting from recommendations of the President's Commission on Heart Disease, Cancer and Stroke, is designed not only to make the best treatment available to cancer patients in local communities, but also to provide training in new techniques to the physicians responsible for their care. By such means, any gap between what science knows about cancer and what

doctors can do about it should be considerably narrowed, if not fully overcome.

There has been real progress against cancer since Sir Percival Pott in the 18th century suggested that cancer of the scrotum in chimney sweeps was due to their frequent exposure to soot; or since Theodore Billroth in the 19th century developed surgical procedures for cancer of the stomach and intestine; or since Peyton Rous early in this century provided the first clear demonstration of the causative role of a virus in one type of malignant tumor, a chicken sarcoma. These were milestones, all. And so were the first activities of the predecessor of the American Cancer Society in pre-World War I days and Congressional action leading to the establishment of the National Cancer Institute in 1937.

In our country today the American Cancer Society and the National Cancer Institute are the two organizations with primary responsibility for leadership and support of cancer research. Funds for cancer research now have been estimated at well over \$300 million per year and thousands of scientists are engaged in full-time pursuit of the problem of cancer, their efforts often blended into effective forces through planning and management.

Gains against cancer seem, sometimes, to come very slowly, but come they must. Scientists in general believe, and I know you share with me the hope, that the threat of malignant disease will be gradually reduced and perhaps ultimately removed through prevention and increasingly effective treatment.

First-Line Treatment For Burns

Antihistamines should be first-line treatment for burns of any severity, Dr. G. Krishna of Kanpur, India, reported in *International Surgery*. Twelve patients with burns of various parts of the body were given chlorpheniramine maleate, in addition to other standard burn therapy. In these patients, swelling was not severe and disappeared early. The drug was injected intravenously when the patients were first admitted to the hospital, then intramuscularly every eight hours for the first 48. This was followed by 4 mg. tablets every eight hours for another 48. Results indicate that the antihistamine neutralizes histamine liberated as a result of the burn injury, and thereby controls fluid and electrolyte loss, the surgeon said.—*Med. World News*, April 8, p. 10.

Use of chlorpheniramine maleate in such cases is not recommended by the manufacturer, however.

Social Security Numbers for Dogs

To foil dognappers and to identify lost dogs, Dr. David H. Timrud of the Princeton University Health Services has established the National Dog Registry. The procedure is this: the dog owner has his Social Security number tattooed by his veterinarian in the right groin of his dog or dogs. The number and an initial registration fee of \$3, covering any number of dogs with the same number, are sent to the National Dog Registry, Box 55, Stanton, New Jersey 08885. The owner is sent a Certificate of Registration. Cooperation of animal suppliers and laboratories is being sought. If the number is reported to the Registry, the owner will be promptly notified so that he can take necessary steps to recover his dog.—*Veterinary Med.*, April, 0. 306.

* * *

One woman's definition of retirement: "Twice as much husband on half as much money."

William McFarland Boling-Physician-Teacher*

Emmett B. Carmichael, M. S., Ph. D.

Birmingham, Alabama

William McFarland Boling was born at Elicott's Mills, Baltimore County, Maryland on July 14, 1811. He was the son of George and Margaret (McFarland) Boling. His father died soon after his birth and his mother moved the family to Greensburg, Pennsylvania.

We have found no records concerning young William's early education. However, when he was eighteen years old, he began to read medicine with Dr. S. P. Brown. He pursued his studies with a great deal of enthusiasm not only for his medical textbooks but to the Greek, Latin and French languages. On October 2, 1835, William enrolled at Jefferson Medical College. He signed the following statement in the Matriculation Register: "I certify that I am a citizen of the State of Pennsylvania and reside in Greensburg. I am 23 years and 3 months old. I have studied medicine 2 years and six months under the direction of Dr. Brown who is a regular and respectable practitioner of medicine, resident then and now residing in Greensburg, State of Pennsylvania." Requisites for graduation at Jefferson were as follows: The candidate must have attended two full courses of lectures and must have studied medicine three years (courses of lectures included) under the direction of a respectable medical practitioner. The candidate had to exhibit to the faculty at his examination satisfactory evidence of his professional acquirement.

There were 239 students matriculated at Jefferson in October, 1835. After the first

course of lectures, William set out for Alabama in quest of a location to begin the practice of medicine. He settled in Coosada, Autauga County, near Montgomery. He practiced with much success until the fall of 1837 when he returned for a second course of lectures at Jefferson Medical College. William's graduation thesis subject was "Fever". He graduated with the M. D. degree on March 8, 1838. His graduation class had 103 men.

After graduation, Dr. Boling returned to Alabama and settled in Montgomery. His practice soon became quite extensive. He reported his findings in his practice to the best medical journals and was a rather prolific author. He wrote well and about many diseases and illnesses. His bibliography was quite extensive for a physician in a small town and without the influence of a medical college faculty. His contributions to the medical literature soon attracted the attention of medical school administrators who sought his services as a teacher.

The Memphis Medical College had been established in 1846. Dr. Boling was invited to take the Chair of Materia Medica after Dr. Francis Ramsay resigned. The term began the first Monday in November and ended the last of February. The following were some of the requirements or regulations for the Doctor of Medicine degree. To be eligible, the candidate had to be twenty-one years of age, of good character, and must have applied himself to the study of medicine at least two years, exclusive of his attendance on medical lectures. A candidate had to attend two full courses of all the lectures. A thesis on some subject connected with the science of medicine was required. The candidate had to

*Read at the forty-third annual meeting of the Alabama Academy of Science, Birmingham-Southern College, April 2, 1966.

stand a satisfactory examination on all of the branches taught in the school.

Dr. Boling resigned after one session.

In 1849, Dr. Boling was called to the Chair of Obstetrics at the medical department of Transylvania University, Lexington, Kentucky. The minutes of the medical faculty for June 25, 1849 read: "Also that Prof. William M. Boling of Montgomery, Alabama, late professor in the Memphis school, be appointed to the chair of obstetrics, etc." Peter's *History of the Medical Department of Transylvania* noted the appointment of Dr. Boling: "In 1849 when Doctor Annan was transferred to the chair of Theory and Practice, the chair of Obstetrics was filled by Doctor William M. Boling of Montgomery, Alabama, for one session. Dr. Boling had taught in the Memphis Medical School of Tennessee, and was favorably known in the South as a good practitioner, an able medical writer and an excellent teacher." Doctor Boling gave the valedictory address to the graduating class on March 1, 1850. As before, he resigned after one session and returned to his home in Montgomery. He never accepted a professorship in any other medical school, although several attractive offers were made him. Having a wide circle of friends, he preferred remaining among them to being a teacher. The result of this decision was an overwhelming practice.

Dr. Boling found a highly respected group of practitioners in Montgomery and in some of the other larger towns in Alabama. Several of his associates and members of the State Medical Association were honored by being elected either as Vice President or President of the American Medical Association. Two of the Montgomery physicians and surgeons, Dr. W. O. Baldwin and Dr. J. Marion Sims were elected President of the American Medical Association. Those elected to the Vice Presidency of the American Medical Association were Dr. W. H. Anderson, Dr. Aaron Lopez and Dr. J. S. Weatherly. Dr. Sims in his book, "The Story of My Life" praised Dr. Boling for his ability to write so well and his

success in publishing his observations. Dr. W. O. Baldwin and Dr. Boling formed a partnership in 1848 which lasted for four years.

The Medical Association of the State of Alabama was organized in December, 1847 and Dr. Boling soon became identified with it. He participated in its meetings and was elected its president in 1851. He also became active in the American Medical Association and served on several committees. He served as chairman of the committee on the Epidemics of South Carolina, Georgia, Florida and Alabama in 1851 and was continued on as chairman for the next year. He was a member of the committee to procure memorials of the Eminent and Worthy Dead in 1855. He was a member of the committee to use influence with the railroads and steamship companies to issue commutation tickets to the delegates of the American Medical Association and their families to the 1856 meeting. He was the official delegate from the Medical Association of the State of Alabama to the American Medical Association in 1855. He was elected Vice President of the American Medical Association on May 2, 1855. His permanent membership in the Association began in 1855.

The titles of his papers in the medical journals point up the fact that he was a well trained physician of his day and that he was an educated person. Many of his papers possess great merit and the following list of titles of his papers impresses one as to his broad knowledge and experience: Cataract Operation; Use of Sulphate of Quinine in Continued Fever; Experiments with Phosphorus in the Form of Alcoholic Tincture or Solution; Physical Signs of Pneumonia at the Apex of the Lung; Injurious Effects of the Use of Antimony in Pneumonia; The Effect of Quinine on the Pulse; Opium Eating; Ligation of the External Iliac for Aneurism; Remittant Fever; Mechanism and Management of Parturition in the Shoulder Presentation; Yellow Fever in Alabama.

For several years, Dr. Boling bore up under his large practice but his feeble frame finally

gave way under the strain. In the spring of 1853, paraplegia showed itself. He seemed better at times and continued his practice as long as he was able to move about. His condition grew worse in the winter of 1858 and he became almost helpless and finally died from the prostrating effect of nausea and vomiting which was due to an attack of intermittent fever on March 4, 1859.

At a meeting of the physicians of the city of Montgomery on March 5, 1859, Dr. Baldwin announced the death of Dr. William M. Boling which occurred at 2:00 P. M. on March 4th. The chairman, Dr. McWhorter, appointed a committee to prepare suitable resolutions for the consideration of the meeting. Drs. Baldwin, Bozeman and Jackson submitted the following report:

WHEREAS it has pleased Almighty God to remove from our midst our beloved brother and distinguished fellow-citizen, Dr. Wm. M. Boling, therefore

RESOLVED, that in his death this community has lost one of its best and most useful citizens; the physicians of Montgomery one of the most loved and skilled of their fraternity, and the Medical profession at large one of its brightest ornaments and most effective laborers

RESOLVED, that in his intercourse with his professional brethren, as well as with Society at large, he ever exhibited those elevated traits which mark the true and honorable man.

RESOLVED, that in token of our regard for the deceased, we wear the usual badge of mourning for thirty days.

RESOLVED that we tender to the widow and mother of the deceased our sincere condolence and that a copy of these resolutions be forwarded to each of them.

Then Dr. Baldwin, Dr. Boling's former partner, rose and said: "Mr. Chairman, it is with no ordinary feelings of emotion that I rise to say a few words on the melancholy occurrence which has called us together. I do not desire to speak of Dr. Boling's professional attainments—they are recorded in

the medical literature of his day. In the literature of that profession to which he emphatically dedicated his whole life—laying as a sacrifice upon its burning altar, a feeble body but feeding its flame with a clear, strong, discriminating mind, and thus he fell a martyr, while yet in the prime of manhood.

To me and to those who knew Dr. Boling as I did, his great merit did not rest alone upon his professional character—it was his personal excellence and private worth which so won the heart of those with whom he was most intimately associated. Though in the frank and open manliness of his noble nature there seemed at times an exterior of severity or bitterness, yet no man ever possessed more kindness and gentleness of heart or was ever more easily moved or approached through the avenues of his affections.

Although the shadows of coming death had been gathered around his brow, and the gloom of its dark drapery had been before our mental vision for many long weeks of unusual pain and suffering on his part, still I did not fully realize the extent to which my own heart was interested in the issue until the final blow came. I have known him many long years—for more than twenty years he has been my warm personal and professional friend and associate—our intercourse has been free, our confidence unmeasured, and our friendship interrupted at last, only by death. . . ."

At the May 1959 meeting of the American Medical Association in Louisville, Ky. Honorary Resolutions were passed to the memory of Dr. Wm. M. Boling.

Dr. Boling was an Episcopalian, a Mason and an Odd Fellow. He married Mary Vincent of Autauga County on October 24, 1837. The Bolings had four children: 1. Helen McFarland; 2. Amelia Donne; 3. William McFarland; 4. George. Dr. Boling was buried in the Oakwood Cemetery, Montgomery.

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Contact Dermatitis from Water

REPEATED WETTING OF THE SKIN has been shown experimentally to predispose to lesions from common agents that are otherwise innocuous, reports Dr. Raymond R. Suskind. Standing in for housewives and others who develop contact dermatitis from frequent exposure to water, guinea pigs were given baths for up to four hours daily for several weeks. While exposure to water alone did not damage skin, significant reactions occurred with addition of such materials as oils, waxes and fatty acids (commonly used by housewives in the home). No reactions to these same agents were noted among animals that had not been wetted.—*Med. Tribune*, Jan. 17, 1966, p. 1.

Sports Medicine Conference In Las Vegas Nov. 27

Team physicians and others interested in sports medicine will meet here Nov. 27 for the Eighth National Conference on the Medical Aspects of Sports.

Sponsored by the American Medical Association's Committee on the Medical Aspects of Sports, the conference will consider medical problems at all levels of athletic competition.

The meeting is in conjunction with the AMA's 20th annual Clinical Convention, Nov. 27-30.

One topic will be the preparation of athletes for high-altitude competition, such as the Mexico City Olympic Games. Other aspects of international competition, such as preparations for winter sports and planning for multi-nation meets, will be discussed.

A forum will review the familiar problem of football "nerve pinch." Two more forums will discuss classification of sports injuries and treatment of acute knee injuries.

Topics of particular interest to high school and college physicians will be reviewed, such as weight control in interscholastic wrestling, treatment of "shin splints," the relationship of physical fitness to athletic fitness, and organization of "grass roots" sports supervision.

A special feature will be a "consultant's corner," an opportunity for participants to discuss individual medical problems with experienced team physicians.

Morning, afternoon, and evening sessions of the conference will be in Caesar's Palace.

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* * *

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Management of the Rh Problem

I. Intrauterine care

II. Technique of amniocentesis

III. Neonatal care

IV. Technique of exchange transfusion

By

George Cassady, M. D.,* Paul McCain, M. D.,** and Betty Vaughan, M. D.***

R. H. was a 26 year old Rh negative white woman, Para 4-0-3, whose previous two children had demonstrated neonatal jaundice, the last requiring three exchange transfusions. During her current pregnancy, antibody titers (albumin) had risen from 1:32 at 20 weeks to 1:128 at 35½ weeks at which time elective Caesarian Section was performed. The infant was a male, weighing 2000 grams, Rh negative, Coombs negative with cord hematocrit of 57 per cent and total bilirubin of 0.7 mgm per cent. The infant died with hyaline membrane disease at 40 hours of age, a preventable, iatrogenic neonatal death—an error of commission.

A. B. was a 24 year old Rh negative white woman, Para 2-0-1, whose previous infant was Rh positive but Coombs negative and demonstrated no evident neonatal jaundice. During her current pregnancy, antibody titer

(albumin) was initially negative at 20 weeks, became positive 1:8 at 28 weeks and rose to 1:16 by 36 weeks. Spontaneous labor began at 39 weeks gestation and within 12 hours she was delivered of an edematous, pale female infant weighing 3600 grams. The infant was Rh positive, "direct Coombs" positive, with cord hematocrit of 10 per cent and total bilirubin of 4.8 mgm per cent. The infant died in cardiac failure 20 minutes after birth, a preventable neonatal death—an error of omission.

I—Care of the in-utero patient: Management of pregnancy in the Rh negative woman.

The purpose of this paper is to review in detail current concepts and advances in the management of the Rh problem. Adequate pregnancy supervision in this condition enables detailed, accurate prediction of the severity of fetal disease long before delivery and is the keystone in management of the condition. Employment and understanding of current basic principles of prenatal care should make the case histories preceding this article relics of the medical past.

Striking antigenic and immunologic differences between fetus and mother are characteristic of human pregnancy and have led to

(Continued on Page 539)

*Director, Newborn Division; Assistant Professor of Pediatrics; University of Alabama Medical Center; Birmingham, Alabama.

**Chief Resident in Obstetrics; Department of Obstetrics & Gynecology; University of Alabama Medical Center; Birmingham, Alabama.

***Chief Resident in Pediatrics, Department of Pediatrics; University of Alabama Medical Center; Birmingham, Alabama.



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



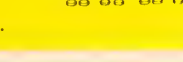
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one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. **PACKAGE INFORMATION:** Trisulfaminic Tablets: Supplied in bottles of 100 tablets. **CAUTION:** Federal law prohibits dispensing without prescription.

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MANAGEMENT OF THE Rh PROBLEM

(Continued from Page 534)

the characterization of pregnancy as an "immunologic impossibility". Despite this theoretical fact, clinical incompatibility between mother and fetus is in reality surprisingly uncommon and appears to almost always be related to differences in red cell antigens. Fifteen per cent of white and seven per cent of negro women are Rh negative (i. e., they have no "D" antigen in their red cells) and are therefore capable of being "sensitized" or "immunized" to this antigen. Transplacental "leaks" of 0.05 to 0.1 ml of fetal red cells into the maternal circulation are currently considered to occur in the normal course of most pregnancies¹ and larger "leaks" are not unusual during complicated pregnancy, labor or delivery. Presentation of these amounts of Rh (D) antigen have been demonstrated to result in maternal production of antibody and transplacental transfer of the anti-Rh antibody globulin into the fetal circulation results in destruction of the Rh (D) positive fetal red cells or "hemolytic anemia of the fetus".²

Such factors as paternal heterozygosity (resulting in a 50 per cent chance of an Rh negative fetus) and materno-fetal ABO incompatibility (with rapid destruction of the fetal cells by naturally occurring macro-globulin as they enter the maternal circulation preventing 'sensitization' or 'immunization') are important protective factors³ and the result of their action is a much lower proportion of Rh immunization than we would theoretically expect. While more than one in ten white infants born might be expected to exhibit the disease, the actual observed incidence is only one in 200-250 deliveries. The *true risk figure* for an Rh negative girl embarking on her obstetrical career is therefore reduced to *one in twenty*.

Once sensitized, pregnancy management is the single most important factor determining fetal or neonatal survival. Lack of pregnancy supervision in the sensitized Rh negative woman has been shown to result in a 30 per cent perinatal mortality risk while appropri-

ate care of the in-utero patient reduces the hazard to less than 10 per cent.⁴ Three factors are currently of vital importance in the management of Rh immunized women.

(1) *Titers*: The presence and level of anti-Rh antibody in maternal serum may simply and accurately be determined. Absence of such antibody ("negative titer") precludes the possibility of sensitization at that point in pregnancy. A "positive titer" indicates maternal sensitization in this or in a preceding pregnancy. Rh antibodies in a "positive saline titer" are generally formed in the early stages of isoimmunization, are usually the larger or "macro"-globulins, and rarely cross the placenta to produce fetal hemolytic disease. A "positive albumin titer" indicates the presence of smaller antibodies to which the placenta is readily permeable and changes in this "albumin titer" are therefore of much greater clinical importance.

(2) *Early delivery*: The only justification for early or premature (37 weeks or less) induction of labor is to prevent fetal death in-utero.⁴ The decision to prematurely effect delivery has generally been based on previous pregnancy history, serial titers, and paternal zygosity. Unfortunately, the "height" of the antibody titer, its rise or its rate of rise during a pregnancy may, on occasion, correlate very poorly with ultimate fetal outcome. A rising titer may occur in a previously sensitized mother whose current fetus is Rh negative and, conversely, stillbirth and hydrops may occur with titers as "low" as 1:4 or 1:8. Talent and experience in evaluation of the past obstetrical history and knowledge of paternal zygosity may improve the "probability" of a right guess concerning the severity of fetal disease, but the likelihood of a *wrong* guess is still disturbingly high.

(3) *Amniocentesis*: The introduction by Liley in 1961⁵ of a simple clinical procedure with a "predictability accuracy" of 94-97 per cent has been of inestimable value in the management of this condition. Although appropriate caution has characterized the acceptance of this technique as a commonly

(Continued next Page)

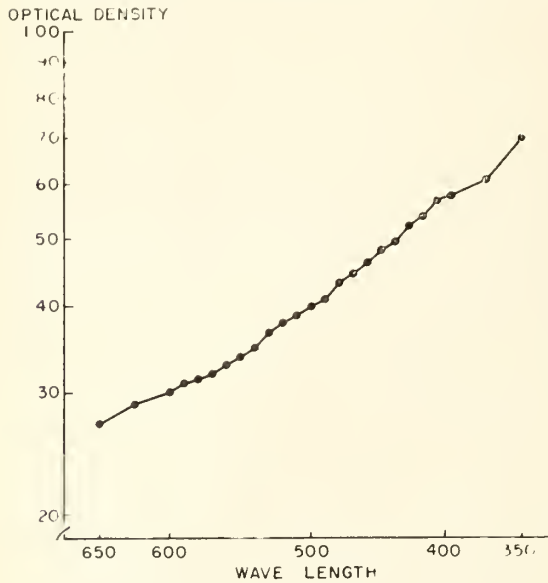


Figure 1. Normal Amniotic Fluid



Figure 2. Blood-Stained Amniotic fluid (containing oxyhemoglobin).

used obstetrical procedure, the mechanical hazards have been extraordinarily rare¹ and the immunologic risks of the procedure appear to be quite infrequent.^{6, 7} At present the only manner in which a fetus may be allowed to mature with any margin of safety is by repeated examination of the amniotic fluid. Accurate spectrophotometric analysis of the bilirubin content of a specimen of amniotic fluid has been shown to have extraordinary accuracy in predicting fetal outcome. Details of our technique for obtaining and handling this fluid have been summarized in section II of this paper and complete details of the technique are readily available in the literature.^{4, 5}

Amniotic fluid from uncomplicated pregnancies demonstrates a characteristic spectrophotometric curve—an example is shown in figure 1. Presence of hemoglobin pigments (primarily oxyhemoglobin) results in the characteristic curve shown in figure 2. In figure 3 is seen fluid from a pregnancy re-

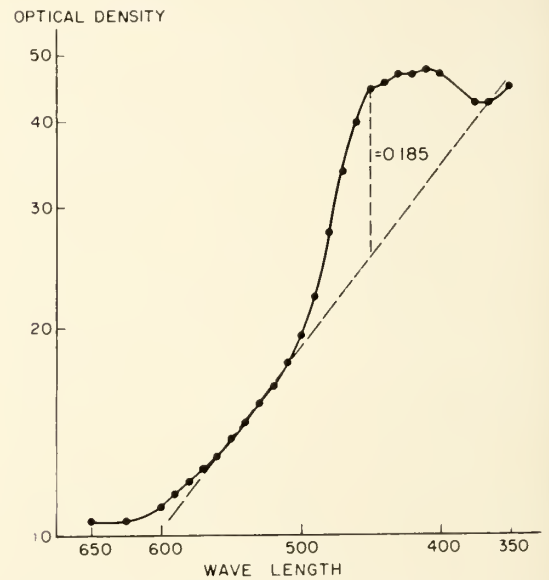


Figure 3. Amniotic fluid in mother whose fetus had severe hemolytic disease.

sulting in the delivery of a severely erythroblastotic infant. The height of the "hump" at 450 mμ (i. e., the deviation of the curve

(Continued on Page 544)



Butazolidin[®] alka

phenylbutazone, 100 mg.
aluminum hydroxide gel, 100 mg.
magnesium trisilicate, 150 mg.
atropine methylbromide, 1.25 mg.

The trial period need not exceed 1 week. In contrast, the recommended trial period for indomethacin is at least 1 month.

That's why it's logical to start therapy with Butazolidin alka—you'll know quickly whether or not it works. And usually, it will.

A large number of investigators have reported major improvement in about 75% of cases. Some patients have gone into remission. Relief of stiffness and pain may be followed quickly by improved function and resolution of other signs of inflammation. And Butazolidin alka is well tolerated, especially since it contains antacids and an antispasmodic to minimize gastric upset.

Contraindications

Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. Because of the increased possibility of toxic reactions, the drug should be used with greater care in the elderly and should not be given when the patient is senile or when other potent chemotherapeutic agents are given concurrently. Large doses of Butazolidin alka are contraindicated in patients with glaucoma.

Warning

If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time.

Usually works within 3 to 4 days in osteoarthritis

Pyrazole compounds may potentiate the pharmacologic action of sulfonyleurea, sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Use with caution in the first trimester of pregnancy.

Precautions

Before prescribing, the physician should obtain a detailed history and perform a complete physical and laboratory examination, including a blood count. The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made to guard against blood dyscrasias.

Adverse Reactions

The most common adverse reactions are nausea, edema and drug rash. Moderately lowered red cell count may sometimes occur due to hemodilution. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vertigo or languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be

attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects.

Confusional states, hyperglycemia, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Dosage

The initial daily dosage in adults is 300-600 mg. daily in divided doses. In most instances, 400 mg. daily is sufficient. When improvement occurs, dosage should be decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information.
6509-V(B)

Also available: Butazolidin[®], phenylbutazone
Tablets of 100 mg.

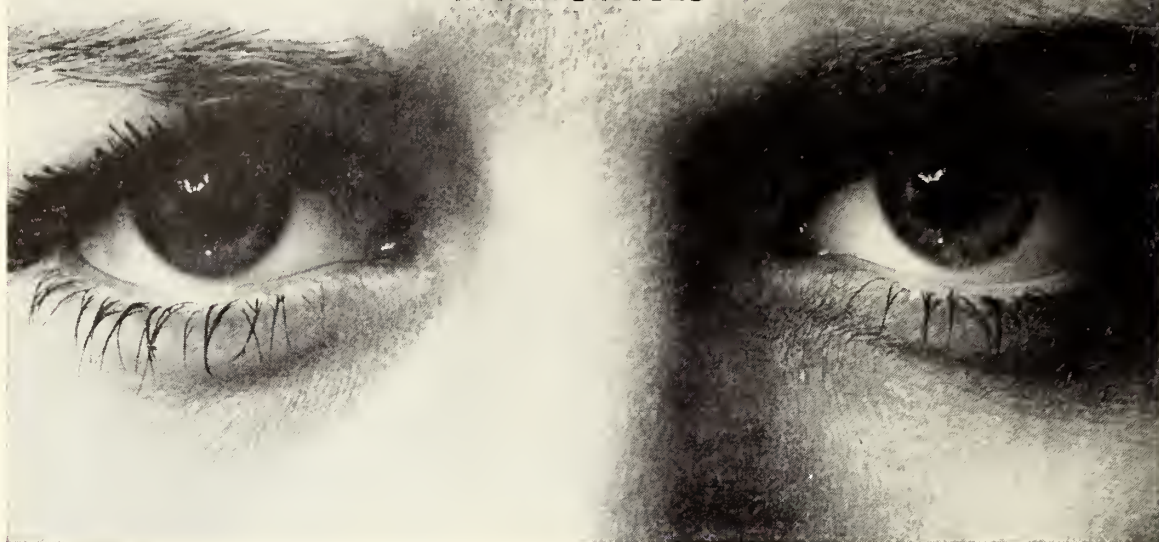


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Each tablet contains:

ACHROMYCIN® Tetracycline HCl 125 mg
Phenacetin 120 mg

Caffeine 30 mg
Salicylamide 150 mg
Chlorothen Citrate 25 mg

The patient can feel better while getting better. ACHROCIDIN brings the treatment together in a single prescription—prompt symptomatic relief together with early, potent control of the tetracycline-sensitive organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

Effective in controlling complicating tetracycline-sensitive bacterial infection and providing symptomatic relief in allergic diseases of the upper respiratory tract.

Contraindication—History of hypersensitivity to tetracycline.

Warning—If renal impairment exists, even usual doses may lead to liver toxicity. Under such conditions, lower than usual doses are indicated and if therapy is prolonged, tetracycline serum level determination may be advisable. Hypersensitive individuals may develop a photodynamic reaction to natural or artificial sunlight during use. Individuals with a history of photosensitivity reactions should avoid direct exposure while under treatment and treatment should be discontinued at first evidence of skin discomfort.

Precautions—Some individuals may experience drowsiness, anorexia, and slight gastric distress. If excessive drowsiness occurs, it may be necessary to increase the interval between doses. Persons on full dosage should not operate any vehicle. Use may result in overgrowth of nonsusceptible organisms. If infections appear during therapy, appropriate measures should be taken. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Infections caused by beta-hemolytic streptococci should be treated for at least 10 full days to help prevent rheumatic fever or acute glomerulonephritis. Use of tetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect has been observed in usual short treatment courses.

Average adult dosage: 2 tablets four times daily, given at least one hour before, or two hours after meals.

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IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withdraw in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

¹ Riese, J. A.; Amer. J. Gastroent., 28:541 (Nov.) 1957

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MANAGEMENT OF THE Rh PROBLEM

(Continued from Page 540)

from the expected "straight line" of normal amniotic fluid) may be small (Zone I), intermediate (Zone II) or large (Zone III). The zone in which the amniotic fluid falls predicts severity of fetal disease.

Group & Number of	Patients	Coombs Pos. Infant			
		Coombs Neg. Infant	No exchange	Exchange	Hydrops or Stillbirth
Zone I—	17	10	6	1	0
Zone II—	9	3	3	3	0
Zone III—	5	1	0	1	3

Table 1. Summary of University of Alabama Medical Center experience with amniocentesis in Rh negative pregnancy. (to July 31, 1966)

Our preliminary experience with this technique is shown in Table 1. Fifty-two taps have been performed on 31 Rh negative patients. *Zone I* fluid has resulted in mild or no disease in 16 of 17 infants (94 per cent). The opposite extreme, *Zone III*, has resulted in life-threatening disease in four of five cases. Three of the four Coombs *negative* infants who nevertheless fell into *Zone II* or *III* had an associated condition which we have found to consistently be associated with a false elevation of amniotic fluid bilirubin content, i. e. fetal *anencephaly* or *maternal jaundice*.⁸ In summary, in our hands at the present time, *Zone I* amniotic fluid predicts with 94 per cent accuracy that exchange transfusion will not be required, while with a *Zone II* or *III* curve (in the *absence* of fetal *anencephaly* or *maternal jaundice*) we can predict with 70 per cent accuracy that exchange transfusion will be needed and with 90 per cent accuracy that fetal hemolytic anemia is present.

Once isoimmunization of the mother is established by titer, amniocentesis becomes essential in the care of the patient in utero. A *Zone I* tracing does *not* predict the fetus to be Rh negative nor does it assure the absence of hemolytic disease in the fetus or neonate.

Its importance is in the 94 per cent accuracy with which we may predict that even if Rh positive and even if Coombs positive, the fetus in utero is *not in jeopardy*. With this information at hand, we are therefore confident that the fetus may mature in utero, thereby preventing unnecessary early induction with the attendant risks of fetal immaturity. This has been the most important use of amniocentesis in our experience to date. Changes in the course of pregnancy such as continued rising albumin titer, development of hydramnios, or other untoward complications should lead the wary physician to repeat the amniocentesis in order to assure that the intrauterine situation remains unchanged.

A *Zone II* curve indicates the likelihood of fetal hemolytic anemia. A low or mid-*Zone II* curve suggests the fetus to be at no risk of intrauterine death in the next 10-14 days. It is our practice to repeat the taps at biweekly intervals in these patients. Upper *Zone II* suggests a more severe fetal hemolytic anemia and must be followed quite cautiously. It is our practice to induce delivery at 37 weeks in patients showing a persistent *Zone II* amniocentesis. Interference with the course of pregnancy prior to 37 weeks is not justified on the sole basis of a *Zone II* amniotic fluid.

Zone III amniocentesis predicts impending fetal death. With sufficient maturity (34 or more weeks of gestation) the infant should be immediately delivered with complete provisions for and expectation of *immediate* exchange transfusion.

In pregnancies of 33 or fewer weeks, the risks of immaturity coupled with severe erythroblastosis appear to be greater than the hazards of intrauterine transfusion. In this latter group, the technique of Liley for fetal

(Continued on Page 546)

DACTILASE®

Each tablet contains:

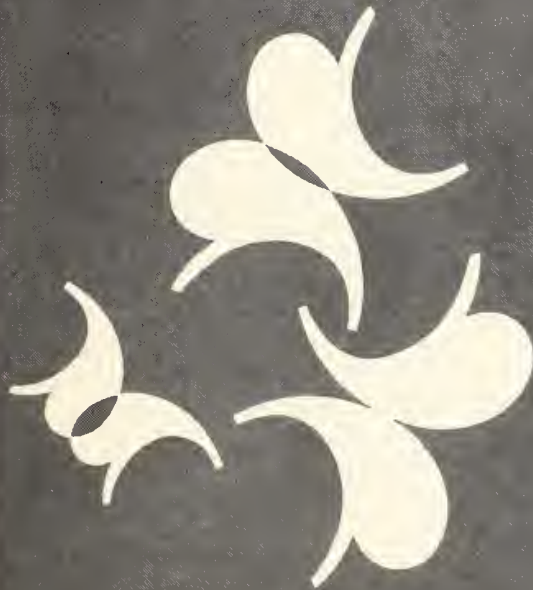
Dactil® (piperidolate hydrochloride), 50 mg.;
Standardized cellulolytic* enzyme, 2 mg.;
Standardized amylolytic enzyme, 15 mg.;
Standardized proteolytic enzyme, 10 mg.;
Pancreatin 3X** (source of lipolytic activity),
100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established.

**As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

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BUTTERFLIES

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Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

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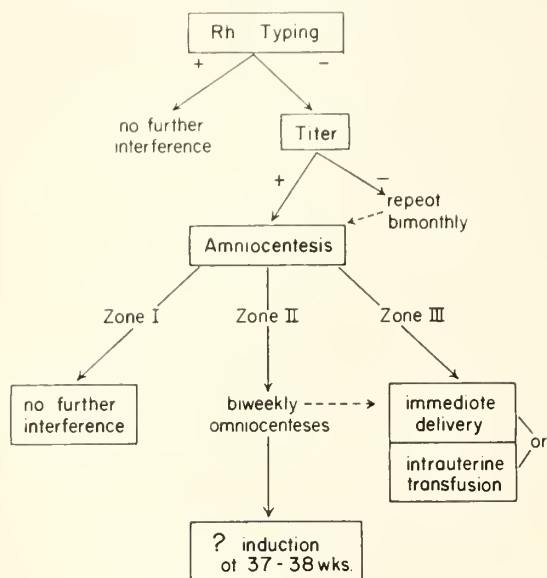
*Management of the Rh Problem During Pregnancy*

Figure 4.

transfusion in utero³ appears to offer the best chances for fetal survival.

Our current management of the Rh sensitized pregnancy is outlined in figure 4.

II—Technique of transabdominal amniocentesis

Our manner of obtaining amniotic fluid at the University of Alabama Medical Center is patterned after the work of Liley⁵ and is now an outpatient procedure in our department.

The procedure, both its risks and importance, is initially explained to the patient, and, as the tap is performed with the patient awake, mild premedication is occasionally employed to relieve anxiety.

The sites most rewarding in recovery of amniotic fluid are the space just posterior to the fetal neck (figure 5) and the space occupied by the small parts of the fetus (figure 6). These are identified by palpation (leopold movements.) Suspicion of the presence of the placenta at either site immediately suggests use of the alternate site.

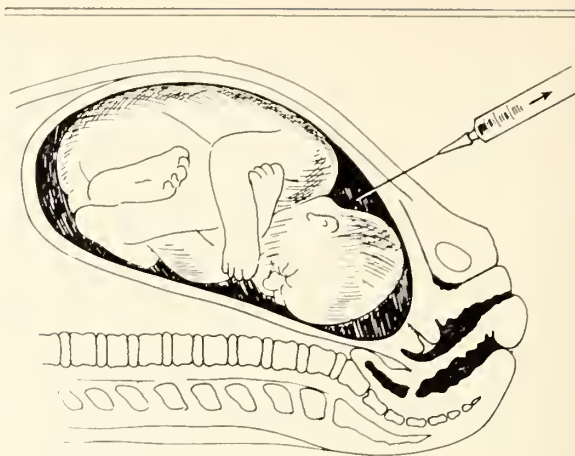


Figure 5. Recovery of amniotic fluid from space posterior to fetal neck. (Our preferred method.)

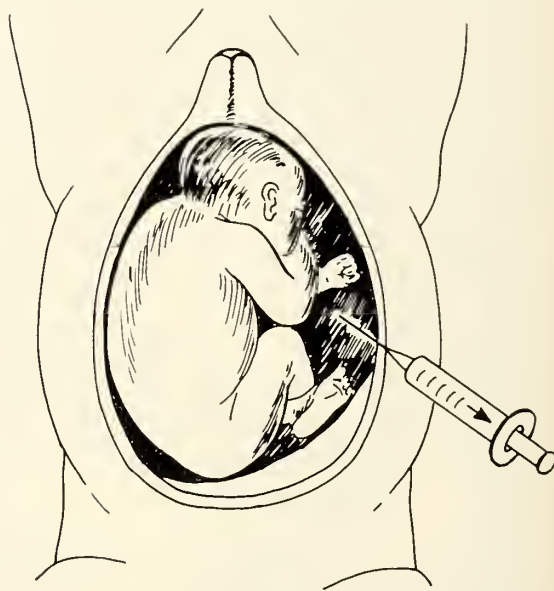


Figure 6. Recovery of amniotic fluid from space occupied by the fetal small parts.

After voiding, the patient's abdomen is thoroughly cleansed with phisohex and prepared with merthiolate. Local anesthesia of the skin and underlying tissue to the depth of the uterus is accomplished with xylocaine.[®] A 22 gauge spinal needle with stylet is passed through the lower maternal abdominal wall

(Continued on Page 548)

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For cold hands and feet, nothing beats hot stoves—but they *are* awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients *like* Gerilid and *know* they are getting relief.

GERILID™

Each chewable tablet contains:
nicotinic acid (niacin) 75 mg. and
aminoacetic acid (glycine) 750 mg.

Administration and Dosage: One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

Side effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

Supplied: Packages of 50 chewable tablets.

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(Continued from Page 546)

2-3 cms. lateral to the mid-line just above the pubic hair line and down through the inferior aspect of the uterus. When the preferred site for amniocentesis is a space posterior to the fetal neck, the operator carefully palpates the fetal back and locates the position of loudest fetal heart tone. This gives him the assurance that he is entering the area posterior, rather than anterior to the fetal neck. Since the head is in flexion, it is generally easy to tell by palpation the difference between the anterior and posterior aspects of the fetal head. The operator's hand is then placed on the head holding it stationary. This serves as a landmark so that the needle will pass just superior to his hand. By directing the needle with one hand, and guarding the fetal head with the other, the operator can be relatively sure that the needle will pass in the region of the fetal neck. When the fetal parts are well delineated in this area, it is fairly certain that the placenta is not implanted there. This is not always true in the vicinity of the fetal small parts.

The area posterior to the fetal neck seems to afford the fewest bloody taps and the most amniotic fluid. Occasionally, pressure on the fundus will increase the amount of fluid in the area of aspiration, facilitating fluid withdrawal. If the needle is introduced cautiously, it is rarely passed as far as the infant itself. If the needle inadvertently touches the fetus, fetal withdrawal will occur.

If the uterus contracts while the needle is being advanced, it is prudent to withdraw the needle 1-2 cms. and wait until the contractions subside. Under no circumstance should the needle be advanced during a contraction, since all tactile sensation is lost.

Between 24 and 36 weeks gestation the fluid is usually simple to obtain, but after this it becomes increasingly more difficult. Following insertion of the needle, the stylus is withdrawn, a sterile 10cc. syringe is applied to the hub of the needle, and aspiration is attempted. It is suggested that the syringe be

changed twice during the procedure to avoid staining of the fluid with blood.

After obtaining the fluid it is immediately placed in a container protected from all light and sent to the Perinatal Research Laboratory in the Department of Pediatrics with appropriate clinical details concerning the pregnancy. Information requested and required for interpretation of findings in the amniotic fluid is shown in figure 7. Fluid need not be refrigerated for analysis, the only cautions being protection from light and immediate centrifugation to remove any gross blood. Mailed samples are accepted by the Perinatal Research Laboratory when accompanied by appropriate clinical information and spectrophotometric analysis will be carried out at no cost to the patient or physician. The patient is observed for one hour after the procedure with monitoring of maternal blood pressure and fetal heart tones.

Maternal:

Name	Date of Amniocentesis:
Age	
Race	Route of Amniocentesis:
LNMP (First day of last normal menstrual period)	Number of attempts and special problems:
EDC	
Gest. Age.	
Blood type	
Antibody titers	
Other pregnancy history or complications	

Figure 7—Requested clinical information required for proper interpretation of amniotic fluid in erythroblastosis.

When and if a traumatic tap occurs, it has been our experience that clearing of heme pigments may require up to two-three weeks. For this reason it may be unrewarding to repeat amniocentesis for at least ten days after a known traumatic tap.

III—Neonatal care—management of hemolytic disease of the newborn.

Hemolytic anemia of the newborn presents a rewarding challenge. With prompt and ap-

(Continued on Page 550)

WHAT'S THE
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In fact, there's as much iron...250 mg.
...in a 5 cc. ampul of Imferon (iron dextran
injection) as in a pint of whole blood.
When iron deficient patients are intolerant
of oral iron...or orally administered iron
proves ineffective or impractical...or if
the patient cannot be relied upon to take oral
iron as prescribed, Imferon (iron dextran
injection) dependably increases hemoglobin
and rapidly replenishes iron reserves.

IMFERON® (iron dextran injection)

IN BRIEF: ACTION AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses. Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

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MANAGEMENT OF THE Rh PROBLEM

(Continued from Page 548)

propriate management, a disorder which unchecked produces motor and mental retardation or death may currently be completely and effectively treated. Seldom is the physician presented with such an opportunity for a "complete cure". Conversely, seldom are the effects of tardy or inappropriate management of such tragic consequences.

Red cell destruction in these Rh (D) positive infants is a direct result of transplacental transfer of maternal anti-Rh (D) globulin. A Coombs test enables us to detect coating of the fetal red cells by this maternal globulin. Coombs test material consists of anti-human globulin. The infant's red cells are washed to remove serum and the Coombs test material is then added. If coated with maternal anti-Rh (D) globulin, addition of the Coombs anti-human globulin results in clumping and a "positive Coombs" is reported. The Coombs test therefore tells us whether or not the infant's red cells are coated with maternal antibody and is diagnostic of hemolytic disease.

The basic problem in this disease is the decreased life span or conversely the "rapid destruction" of the coated fetal red cells. We may discuss three rather arbitrary, separate clinical pictures these infants may present, based on the degree of severity of this hemolytic process.

Mild Disease: A prevalent misconception is that all Coombs positive infants require exchange transfusion. One-third to one-half of Coombs positive neonates appear to fall into a group in which the hemolytic process is mild, early anemia is moderate, and bilirubin accumulation seldom excessive. Exchange transfusion is therefore seldom required in these infants. The mild neonatal hemolytic anemia may, however, accentuate the "physiologic anemia of infancy"—therefore, hemoglobin and hematocrit levels in these infants should be closely followed through the early months.¹⁰ Simple packed-cell transfusion may on infrequent occasion be necessary in these infants. Late *anemia* is a hazard in this

group; specific treatment is *red cell transfusion*, if necessary.

Moderate Disease: Bilirubin is an intermediate breakdown product of hemoglobin and is normally conjugated and excreted by the liver. In the newly born infant, inexperienced and immature liver enzyme systems may retard this conjugation process and the increased load of bilirubin from an active hemolytic anemia may result in progressive accumulation of unconjugated bilirubin. Accumulation of bilirubin in serum or body tissues is probably harmless but its deposition in the central nervous system tissue has been shown to result in motor and mental damage or death—"kernicterus". Shown in table 2 are bilirubin levels at certain ages which, if present, predict that the usual infant will be unable to prevent accumulations of bilirubin exceeding 20 mgm per cent, the level at which most authorities agree the hazard of neurologic damage becomes quite real. There is *no known age limit* to this harmful effect of bilirubin; large indirect bilirubin loads in two and three week olds (even three year olds) may result in similar nervous system damage.

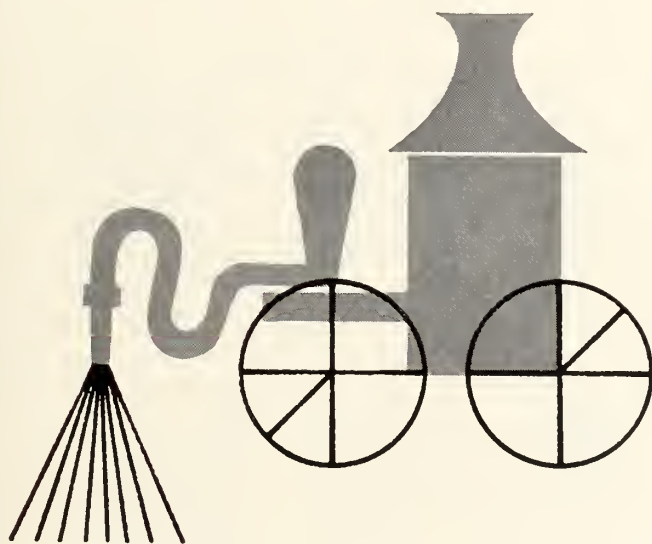
Age	Bilirubin (ind.)
Cord	5 - 6 mgm%
8 h.	8 - 10 mgm%
24 h.	13 - 16 mgm%
36 h.	15 - 18 mgm%

Table 2.

With more active hemolytic disease, the ability of the infant's liver enzyme systems to handle the bilirubin becomes an important factor. Active interference is therefore necessary to prevent central nervous system accumulation of bilirubin in damaging amounts and the levels shown in Table 2 therefore provide useful clinical criteria for exchange transfusion. It is wise *NOT* to wait until the bilirubin has reached 20 mgm per cent; delay results in increasing bilirubin deposits in tissues, higher "rebound" after the exchange, and the likelihood of repeat exchange trans-

(Continued on Page 552)

**SAVES
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WATER**



METAHYDRIN (trichlormethiazide) is prescribed by physicians because it not only approximates the diuretic efficacy of parenteral meralluride injection . . . but, *it is the least expensive of all "brand-name" thiazides.* Therefore, when you prescribe METAHYDRIN (trichlormethiazide) your patients receive the thiazide diuretic that removes a little more salt and water than earlier thiazides, with relatively less loss of potassium . . . and, it's therapy they can more easily afford . . . *only pennies a day.*

METAHYDRIN®

(trichlormethiazide)

oral diuretic

Dosage: One 2 or 4 mg. tablet once or twice daily.

Precautions: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

Side Effects: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have occasionally been noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by the administration of thiazides.

Contraindications: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

How Supplied: Bottles of 100 and 1000 tablets.

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(Continued from Page 550)

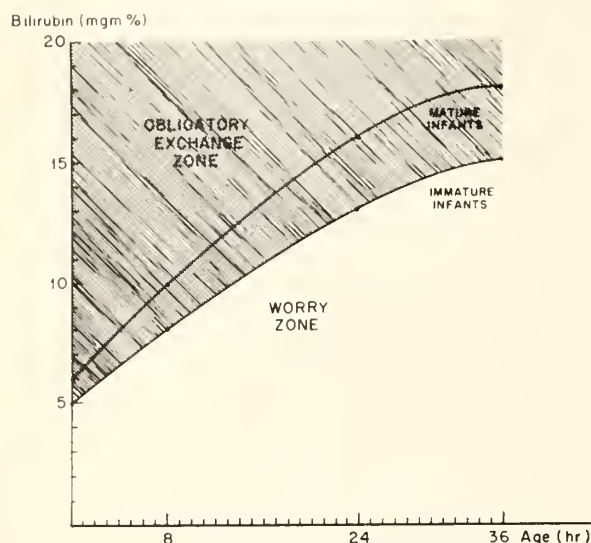


Figure 8. Useful guide in visually recording rate of rise of bilirubin.

fusion is much greater when there is unnecessary delay in performing the initial exchange transfusion.

The technique we have found most helpful in predicting early the ultimate necessity for exchange transfusion is the graphic plotting of serial bilirubin determinations in each patient (see figure 8). In this way, a visual and accurate estimation of the rate of bilirubin accumulation provides the physician with information concerning the balance between liver function and hemolysis. In summary, the major hazard in this group is *hyperbilirubinemia* with kernicterus; specific treatment is *exchange transfusion*, when necessary. *Late anemia* may also occur in these infants and periodic checks of hemoglobin and hematocrit are advised.

Severe Disease: Immediate (delivery room) "exchange transfusion" is performed for purposes entirely different than the elective exchange. When fetal erythropoiesis is unable to keep up with the hemolytic process, *striking anemia* results and *high-output cardiac failure* occurs. This is the "cause of death" for the stillbirths and represents *the major hazard in the hypoxic, moribund*

neonate. Venous pressure must be reduced and the hypervolemic, anemic vascular contents must be carefully adjusted toward normal. Immediate insertion of an umbilical venous catheter and reduction of the elevated venous pressure by removal of excessive blood is the first step to be taken. The deficit thereby created relieves the congestive failure and *must not be replaced* when the infant's condition improves. The next step, correction of the severe anemia (the *cause* of the cardiac failure), is not accomplished in the usual manner with simple transfusion. Instead, in order to prevent volume changes which simple transfusion may produce, an "exchange" is performed in which for each volume of blood transfused an equal volume of anemic blood is removed. Thus, volume changes are minimized and the least possible stress is placed on the moribund infant. Even with adequate treatment, mortality is high in this condition and *our best treatment consists of prevention* by means of early delivery or, if necessary, intrauterine transfusion.

The single most important factor in management of the neonate with hemolytic disease is *adequate preparation*. Inadequate supervision of the intrauterine patient is seldom corrected by elegant or elaborate neonatal care after birth. We must understand the nature and extent of the fetal condition *before delivery* in order to be prepared to take proper care of the newly born infant. Unnecessary induction of early labor imposes the additional, entirely unnecessary hazards of immaturity while, conversely, unnecessary delay in delivery or inadequate preparation for neonatal disease is seldom correctable. As discussed in section I of this paper, accurate prediction of the fetal situation is now possible and such knowledge is essential in the care of the neonate.

IV—Technique of exchange transfusion

The procedure of exchange transfusion used in this center is patterned after the method of Diamond¹¹ employing cannulation of the umbilical vein with alternate with-

(Continued on Page 554)

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AND
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100
102

Metatensin lowers blood pressure and keeps it low—effectively and economically. It combines reserpine with trichlormethiazide which affords more potent saluresis with less loss of potassium than from earlier thiazides. Reserpine contributes antihypertensive effect by relieving anxiety and tension. Metatensin is well-tolerated over long periods; with its effectiveness and economy it assures antihypertensive therapy you and your patients can stay with.

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Contraindications: Complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.

Supplied: Metatensin tablets, 2 mg., 4 mg.—bottles of 100 and 1000.

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1. Stopcock Assembly (Stopcock with extension tube, 40")
2. Extension tube, 33".
3. Umbilical catheter, #5 feeding, approximate capacity 0.22 ml.
4. Umbilical catheter, #8 feeding, approximate capacity 0.33 ml.
5. Two sterile Polypropylene Syringes, 20 cc.
6. Sterile Polypropylene Syringe, 5 cc. with 23 gauge x 1" needle
7. Calibrated waste blood container
8. Blood administration set
9. 15 cm. ruler (to measure venous pressure)
10. Ampule of 10% Calcium gluconate, U. S. P., 10 ml.
11. Airway for blood bottle
12. Antiseptic towelette
13. Three gauze sponges, 2" x 2"
14. Exchange transfusion record

Table 3. Contents of: Sterile Exchange Transfusion Tray. Available from—Pharmaseal laboratories. Glendale, California (Catalog No. 4110)

drawal and infusion of blood. The following is a detailed description of our usual procedure.

A separate treatment room in the nursery area is the best location for exchange transfusions. Use of general operating suite is to be condemned as (1) operating room nurses are less familiar with the procedure and with care of babies, (2) the room temperature in most operating suites is too cold and maintenance of body temperature in the baby becomes a real problem, (3) equipment, emergency and otherwise, is more readily available and appropriate in a nursery area, and (4) transporting a critically ill infant to and from the nursery may increase the already formidable hazards of the procedure.

Personnel involved in an exchange should total at least three—one person to perform the actual exchange, one to keep record of "in and out" volumes of blood and carefully monitor the infant's condition and a third to assist the operator. The person *with most*

experience in exchange transfusions should perform the procedure. This is usually the pediatrician but in certain areas it may be the obstetrician or family physician who is best qualified to perform the procedure.

Necessary equipment may vary but ideally should include the following or some acceptable variation thereof: (1) A means of maintaining the infant's temperature is mandatory. The actual body temperature is best monitored with a telethermometer. At the University of Alabama Medical Center a heat-shield* unit is used. Circulating hot water mattress or even hot water bottles may also be acceptable. Prepackaged disposable transfusion sets** are available and most convenient. The sterile contents of this kit are listed in table 3 while additional neces-

*Sierracin Cradle Warmer—Sierracin Corporation, 12780 San Fernando Road, Sylmar, California.

**Pharmaseal Laboratories #4110.

(Continued on Page 556)

When depressed patients say:



"I can't sleep at night"



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NORPRAMIN[®]
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non-sedating • rapid-acting
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helps restore normal patterns of sleep and activity

Norpramin (desipramine hydrochloride) often reverses the signs and symptoms of depression including sleep disturbances, feeling of sadness, guilt, anxiety, worthlessness and bodily complaints without physical basis. In 2-5 days most patients become more hopeful, active and less weighed down by their problems.

Norpramin (desipramine hydrochloride) has only slight sedative qualities, nevertheless sleep disturbances and restlessness are relieved as depression is lifted. If anxiety or tension develop or persist a tranquilizer may be added or dosage reduced. Side effects are usually mild, occurring in about 1 of 4 patients.

Indications: In moderate to severe depression—neurotic or psychotic. **Dosage:** Optimal results are obtained at a dosage of two 25 mg. tablets t.i.d. (150 mg./day). **Contraindications and Precautions:** Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of an MAO inhibitor. Safety in human pregnancy has not been established. **Adverse Effects:** Usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste", sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs. **Supplied:** Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

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Table 4. Additional equipment often necessary during exchange transfusion.

A. Sterile supplies

1. Gowns
2. Masks
3. Caps
4. Surgical gloves
5. Silk suture and needles
6. Mosquito hemostats (2)
7. Forceps
 - (a) "pick up" without teeth (Durr # R 161-05)
 - (b) eye forceps (Durr # 320-120)
8. Sterile towels (3)
9. Scalpel blade
10. Normal saline, 500 cc.
11. Gauze sponges, 4 x 4, 12

B. Non-sterile supplies and drugs

1. Bulb syringe for suction
2. Suction machine
3. Safety pins
4. Stethoscope
5. Tele-thermometer
6. Unsterile towels
7. Oxygen supply with mask or funnel
8. Laryngoscope and endotracheal catheters
9. Ampule of heparin (100 units per ml.)
10. Ampule of protamine sulfate 1% solution, 5 cc. (50 mg)
11. Ampule of calcium gluconate, 10%
12. Ampule of sodium bicarbonate
13. Alcohol 70%, 90 cc. bottle
14. Iodine solution, 1%, 60 cc. bottle

sary available equipment, including drugs, has been summarized in Table 4.

Blood used for the exchange ideally should be freshly drawn and heparinized because it affords simpler technical operation, does not require warming, contains low potassium levels and adequate amounts of labile clotting factors, negates need for administration of calcium, is not diluted with 130 ml of A. C. D. solution per 500 ml of "blood", and does not have the extreme acidity (pH less than 7.0) of A. C. D. bank blood.¹² The only disadvantage of heparinized blood is that it is less readily available in most blood banks. A "walk-in" donor with the required blood type is necessary. Citrated blood may be used in lieu of heparinized blood but carries with it distinct disadvantages such as (1) a lowered calcium ion due to the citrate, requiring administration of calcium gluconate; (2) an elevated potassium level, proportionate to the length of storage; (3) stored bank blood is cold and requires rewarming after refrigeration; (4) A. C. D. solution lowers the hematocrit and increases the acidosis adding the significant hazard of producing profound

acidosis in the baby during and immediately following the exchange.¹²

Type specific Rh negative blood, *matched against the mother's blood*, is used for the exchange transfusion as a rule. The volume of donor blood used per exchange is about 150 ml per kilogram of the baby's weight, usually not exceeding a total of 500 ml.

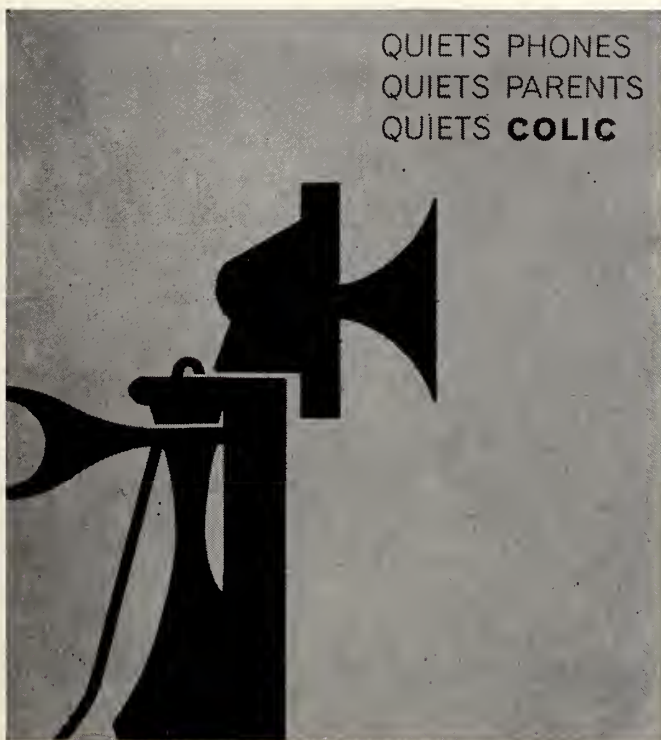
The actual exchange is carried out using the thermostated heat shield unit with the baby's extremities restrained with soft towels and pins. A stethoscope bell is taped on the left chest for following the heart rate and rhythm. A nipple and glucose water are made readily available as adjuncts in keeping the infant quiet. The skin of the abdomen is cleansed, first with iodine solution (one per cent) utilizing at least three to four single applications with gauze sponge, followed by thorough removal of the iodine with 70 per cent alcohol.

Prior to insertion of the umbilical catheter, the gowned and gloved operator must check the sterile equipment to see that the blood

(Continued on Page 559)

In colicky infants Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying and improves feeding patterns. It permits sleep and rest for patient and family. The less than hypnotic amount of phenobarbital in the recommended dose affords a mild, calming action and enhances the antispasmodic action of Piptal (pipenzolate bromide). The latter drug, as reported in the medical literature, has a favorable ratio of effectiveness to side-effects which is unusual in anticholinergics and thus is particularly appropriate to pediatric use.

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QUIETS PARENTS
QUIETS **COLIC**



PEDIATRIC PIPTAL® WITH PHENOBARBITAL

each cc. contains 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol.

Pleasant-tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be given by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. It is contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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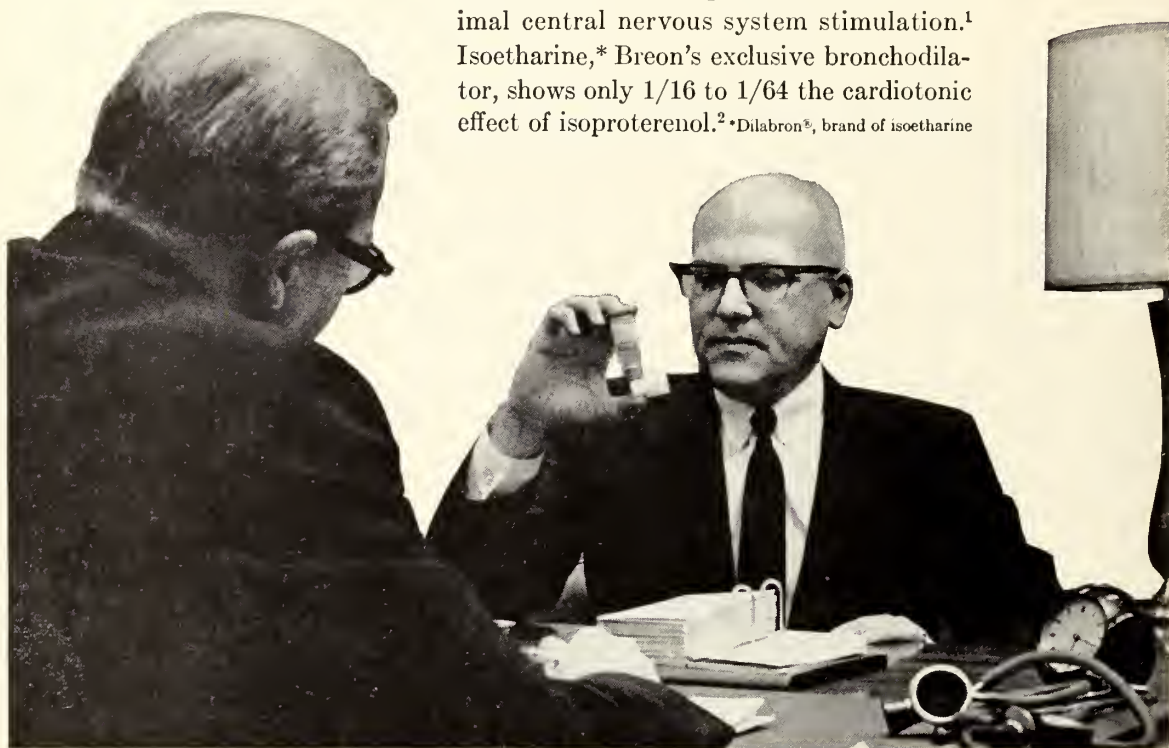


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BRONKOMETER® ASTHMA, CHRONIC BRONCHITIS, EMPHYSEMA

isoetharine 0.6%; phenylephrine 0.125%; thenyldiamine 0.05%—Superior because it contains isoetharine

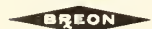
COMPOSITION: Bronkometer delivers at the mouthpiece 200 metered doses of: 350 mcg isoetharine methanesulfonate (0.6%); 70 mcg phenylephrine HCl (0.125%); and 30 mcg thenyldiamine HCl (0.05%) with saccharin, menthol and fluorochlorohydrocarbons as inert propellants. Preserved with ascorbic acid 0.1% and alcohol 30%.

RECOMMENDED DOSAGE: One or two inhalations with at least one minute between inhalations. Occasionally more may be required, however in most cases, inhalations need not be repeated more than every four hours. Dosage should be adjusted to the severity of the condition and to patient's response.

PRECAUTIONS: Bronkometer is unusually free from cardiovascular and other side effects, but the usual precautions associated with sympathomimetic amines should be observed. Bronkometer should not be administered simultaneously with epinephrine or similar compounds because of the possibility of tachycardia, although it may be alternated with these agents. Dosage must be carefully adjusted in patients with hyperthyroidism, hypertension, acute coronary disease, cardiac asthma, limited cardiac reserve and in individuals sensitive to sympathomimetic amines.

SUPPLIED: 10 ml pressurized aerosol vials complete with measured dose valve and oral nebulizer.

References: 1. Spielman, A. D.: *Curr. Therap. Res.* 3:235 (June) 1961. 2. Herschfus, J. A.; Bresnick, E.; Levinson, L.; and Segal, M. S.: *Ann. Allergy* 9:769 (Nov.-Dec.) 1951.



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MANAGEMENT OF THE Rh PROBLEM

(Continued from Page 559)

bleeding into peritoneal cavity, or other volume errors in technique. Frequent venous pressures should be recorded during the procedure as warranted by the situation but are best measured after each 100 ml. exchanged.

Blood is withdrawn, discarded, and bank blood infused in 20 ml. increments, smaller volumes being used on occasion for critically ill or very small babies. The rate of exchanging blood is determined by the smoothness of the infusion and withdrawal of blood and the baby's condition. Most babies are quiet and even go to sleep if allowed to suck on a nipple. Too rapid infusion or withdrawal may result in collapse of vein or "whipping" of the catheter.

A complete and accurate record must be kept of the procedure, recording each increment of blood (as called out *distinctly* by the operator) as well as recording the baby's vital signs. The accumulated total on the flow sheet (figure 10) must be available to the operator throughout the procedure.

At completion of the exchange, samples are taken for post-exchange bilirubin and hematocrit and 200 mg. of protamine sulfate are given via the umbilical catheter to counteract the heparin in the blood used. If citrated blood is used, 1 ml. of calcium gluconate may be given after each 100 ml of blood infused. Care is taken to give the calcium very slowly, with special attention given to cardiac rate as bradycardia is common.

The catheter is withdrawn, a terminal blood culture taken and/or tip of catheter is cultured, and the umbilical stump is ligated. The child must be observed carefully for any umbilical bleeding, change in vital signs, or cardiac failure. Cardiac failure, if present, occurs in the hour *following*, not during the exchange.

It is pertinent to point out that antibiotics are *not* useful and that they are potentially harmful.^{1,2} We condemn the routine use of so-called prophylactic use of drugs. On the contrary, we believe that adequate clinical

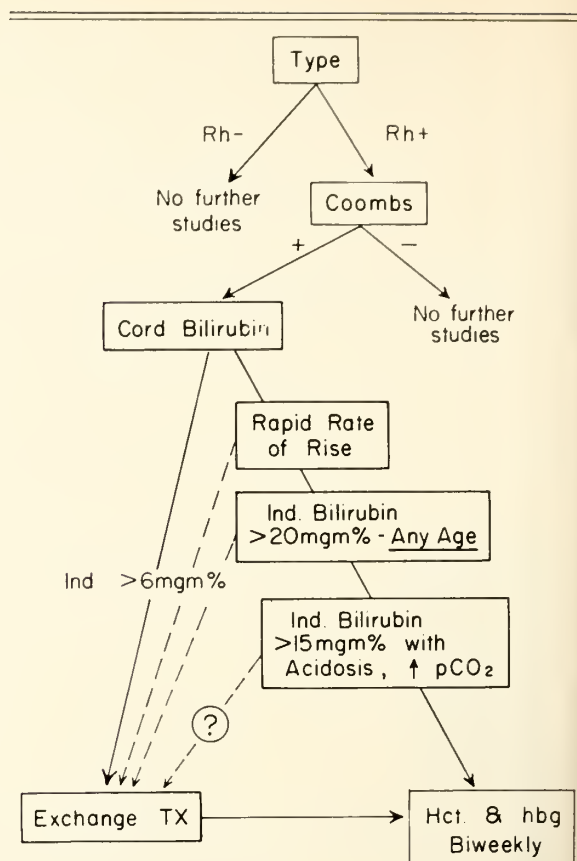


Figure 11. The current approach to the infant of the Rh negative mother at University of Alabama Medical Center—High Risk Nursery.

evidences of infection must be present before antibiotics are given.

It will be noted that in our procedure of preparing for exchange transfusion, no saline or other soak is used on the umbilical cord. Such soaking increases bacterial colonization and promotes infection. Omitting this commonly used technique is our method of "prophylaxis" against infection and has not increased the technical difficulty of catheterizing the vein.

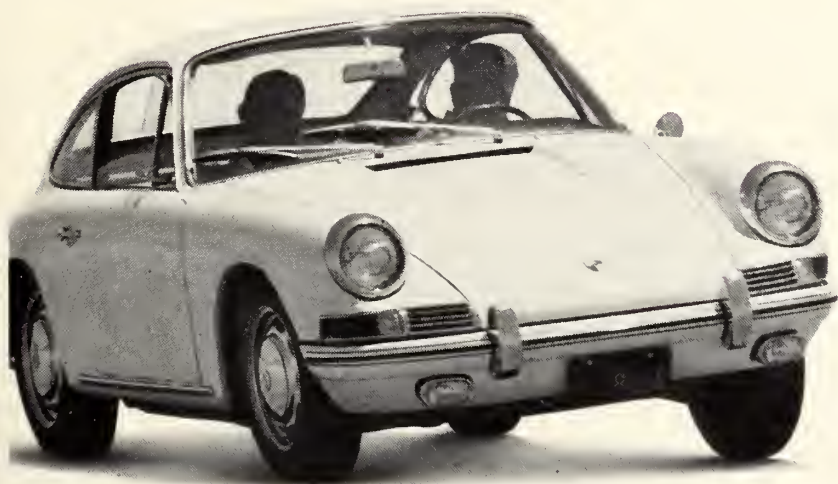
In figure 11 is summarized our current approach to the infant of the Rh negative mother.

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(Continued on Page 562)

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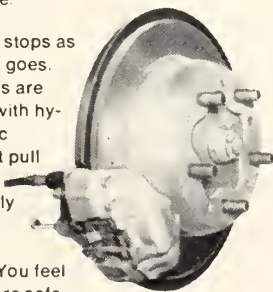
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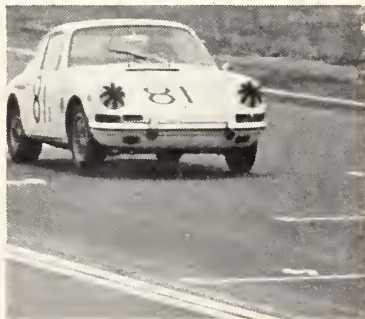
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MANAGEMENT OF THE Rh PROBLEM

(Continued from Page 560)

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Parasitic Travelers

Air travel has so radically shortened the time factor in traversing the globe that diseases formerly restricted to equatorial zones now can be observed in temperate areas, such as the northeastern United States. A case in point is a dentist, who recently returned from a visit to the late Dr. Albert Schweitzer's hospital in Lambarene, Gabon. Dr. Frederick Reiss of New York City reports that the patient was infected with the sand-flea *Tunga penetrans*, a parasite that, ironically, originated in the West Indies. Researchers believe it probably was first transported to the west coast of Africa in a load of ballast sand in 1872, from where it spread to several African regions. (The parasite was known to the Spaniards not long after Columbus landed at Guanahani on Oct. 12, 1492.) In the present-day patient, there were numerous tender, crusted, oozing lesions under several toes as well as on the plantar surface of both feet. Sand-fleas burrow into the skin, lay their eggs, die and shrivel up. The lesions were thoroughly curetted and dressed with an antibiotic ointment; the patient recovered in 12 days.—*Arch Derm.*, April, pp. 404-407.

* * *

It's got so now that in order to know which specialist to call in, you've got to first diagnose yourself.

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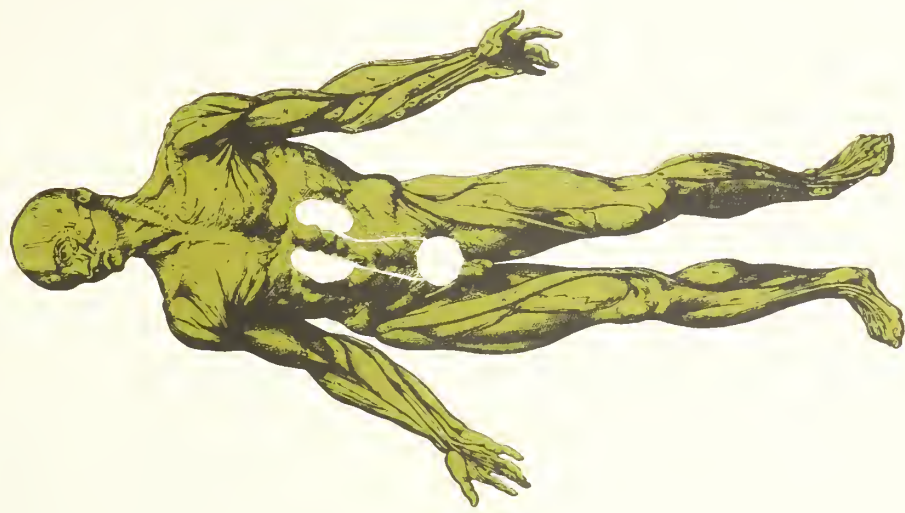
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3. FREQUENCY OF ISSUE: Monthly		4. LOCATION OF HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHER (Not printer): 19 South Jackson Street, Montgomery, Alabama 36104	
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PUBLISHER (Name and address): Medical Association of the State of Alabama, Montgomery, Alabama			
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123-101, 123-102, 123-103, 123-104, 123-105, 123-106, 123-107, 123-108, 123-109, 123-110, 123-111, 123-112, 123-113, 123-114, 123-115, 123-116, 123-117, 123-118, 123-119, 123-120, 123-121, 123-122, 123-123, 123-124, 123-125, 123-126, 123-127, 123-128, 123-129, 123-130, 123-131, 123-132, 123-133, 123-134, 123-135, 123-136, 123-137, 123-138, 123-139, 123-140, 123-141, 123-142, 123-143, 123-144, 123-145, 123-146, 123-147, 123-148, 123-149, 123-150, 123-151, 123-152, 123-153, 123-154, 123-155, 123-156, 123-157, 123-158, 123-159, 123-160, 123-161, 123-162, 123-163, 123-164, 123-165, 123-166, 123-167, 123-168, 123-169, 123-170, 123-171, 123-172, 123-173, 123-174, 123-175, 123-176, 123-177, 123-178, 123-179, 123-180, 123-181, 123-182, 123-183, 123-184, 123-185, 123-186, 123-187, 123-188, 123-189, 123-190, 123-191, 123-192, 123-193, 123-194, 123-195, 123-196, 123-197, 123-198, 123-199, 123-200, 123-201, 123-202, 123-203, 123-204, 123-205, 123-206, 123-207, 123-208, 123-209, 123-210, 123-211, 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123-323, 123-324, 123-325, 123-326, 123-327, 123-328, 123-329, 123-330, 123-331, 123-332, 123-333, 123-334, 123-335, 123-336, 123-337, 123-338, 123-339, 123-340, 123-341, 123-342, 123-343, 123-344, 123-345, 123-346, 123-347, 123-348, 123-349, 12			

muscle spasm



GENITOURINARY TRACT SPASM

MANAGEMENT OF THE Rh PROBLEM

(Continued from Page 560)

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Parasitic Travelers

Air travel has so radically shortened the time factor in traversing the globe that diseases formerly restricted to equatorial zones now can be observed in temperate areas, such as the northeastern United States. A case in point is a dentist, who recently returned from a visit to the late Dr. Albert Schweitzer's hospital in Lambarene, Gabon. Dr. Frederick Reiss of New York City reports that the patient was infected with the sand-flea *Tunga penetrans*, a parasite that, ironically, originated in the West Indies. Researchers believe it probably was first transported to the west coast of Africa in a load of ballast sand in 1872, from where it spread to several African regions. (The parasite was known to the Spaniards not long after Columbus landed at Guanahani on Oct. 12, 1492.) In the present-day patient, there were numerous tender, crusted, oozing lesions under several toes as well as on the plantar surface of both feet. Sand-fleas burrow into the skin, lay their eggs, die and shrivel up. The lesions were thoroughly curetted and dressed with an antibiotic ointment; the patient recovered in 12 days.—*Arch Derm.*, April, pp. 404-407.

* * *

It's got so now that in order to know which specialist to call in, you've got to first diagnose yourself.

ANNUAL SESSION

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Jefferson Davis Hotel

April 20-21-22, 1967

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5. LOCATION OF PRINTING OFFICE OF PUBLICATION (Name, street, city, state, zip code) 19 South Jackson Street, Montgomery, Alabama 36104	6. NAMES AND ADDRESSES OF PUBLISHER, EDITOR AND MANAGING EDITOR		
	PUBLISHER (Name and address) Medical Association of the State of Alabama, Montgomery, Alabama		
	EDITOR (Name and address) William L. Smith, M. D., 19 South Jackson Street, Montgomery, Alabama 36104		
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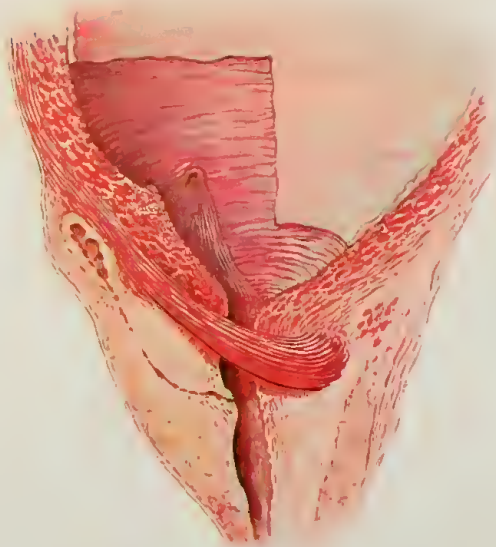
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GENITOURINARY TRACT SPASM

Spastic conditions of the genitourinary tract as a result of inflammation or calculi are often difficult to treat due to the combination of voluntary and involuntary neural control of the system. Urine enters the bladder in periodic spurts brought about by successive peristaltic waves that begin in the smooth muscle of the renal pelvis and pass downward. The normal anatomical constrictions of the ureters are of clinical importance because they frequently inhibit the passage of small calculi.

Abnormal distention of the bladder as a result of an obstructed outlet due to stricture of the urethra or an adenomatous prostate often requires consideration of the smooth muscle involved. Because prostatic tubules invade the internal smooth muscle layer of the urethra, unusual enlargement of the prostate impedes the sphincter-like action of this muscle. Micturition, with inflammation of the bladder and attending atonicity, is more frequent and in cases of long duration (e.g. tuberculosis) contracture of the bladder approaches a permanent state. The clinical importance of the smooth musculature in the urinary tract cannot be overemphasized.

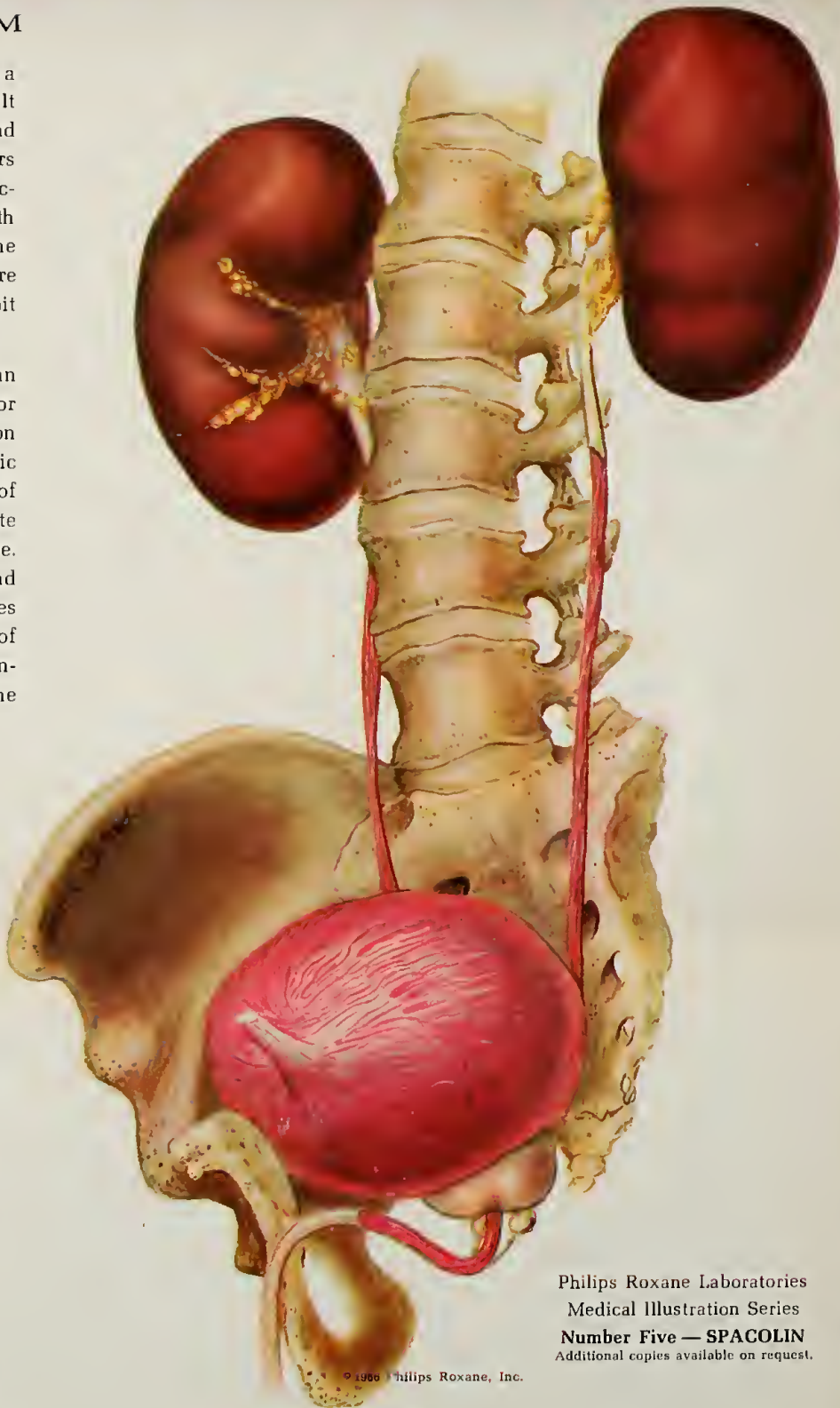
SMOOTH MUSCULATURE OF THE URINARY TRACT



Artist's rendering of the urinary bladder illustrating the trigone, circular, and longitudinal layers of smooth muscle. Note the spray of fibers which passes from the trigone to the wall of the urethra.

The ureters are composed of three layers of smooth muscle, an inner longitudinal layer, a middle circular layer, and an outer longitudinal layer which course the entire length from the renal pelvis to the wall of the bladder where the ureters open as slit-like apertures for the most part retaining their own musculature. They are fairly uniform in size except for three slightly constricted portions, one at the ureteropelvic junction, the second at the pelvic brim, and the third at the extreme lower end of the ureter as it passes through the bladder wall.

The smooth musculature of the bladder is constituted in three general layers with poorly defined boundaries. The outer layer is composed mainly of longitudinal fibers which extend to the neck of the bladder where certain bundles unite to form a loop around the anterior surface of the vesical orifice. Within this loop, the circular layer forms a wedge below the outlet and flows down the urethra in an oblique direction surrounding the canal as a thin layer which, when stimulated, provides an upward pull on the urethral canal. The upward pull of this loop combined with the downward pull of the longitudinal



Philips Roxane Laboratories
Medical Illustration Series
Number Five — SPACOLIN

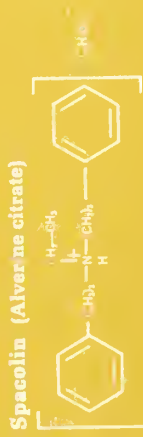
Additional copies available on request.

layer gives a sphincter-like action to the musculature at the bladder neck although no true sphincter is present. The musculature of the trigone arises from the longitudinal muscle fibers of each ureter and spreads over the muscles of the bladder wall.

The male urethra is for the most part mucous membrane which contains loosely arranged longitudinal and circular smooth muscle layers. In the prostatic part at the neck of the bladder, the circular layer is highly developed and acts in harmony with the descending array of circular fibers of the bladder contributing to the sphincter-like control of the neck.

Spacolin (Alverine citrate) is a musculotropic antispasmodic which acts directly on the smooth muscle of the genitourinary tract with rapid onset and long duration. Because the parasympathetic nervous system is avoided, anticholinergic side effects do not occur. Moreover, Spacolin, (Alverine citrate) is ideally suited for relief of smooth muscle spasm in the presence of prostatic hypertrophy.

PHARMACODYNAMICS OF SPACOLIN® (Alverine citrate)



- A potent musculotropic counter-spasmodic.
- Little or no effect on normal muscle tonicity and motility.
- Spasmodic effect is 2 1/2 to 3 times stronger than papaverine.
- Unrelated to atropine or atropine-like drugs.
- Therefore no atropine-like side effects such as dry mouth, blurred vision, constipation and urinary retention.
- Not contraindicated in glaucoma or prostatic hypertrophy.

PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc. Columbus, Ohio

FAST RELIEF OF SMOOTH MUSCLE SPASM

SPACOLIN® (Alverine citrate)

Each tablet contains: Alverine citrate.....120 mg.

INDICATIONS: Smooth muscle spasmolytic for use in spastic colon, spastic conditions of the gastrointestinal tract, biliary dyskinesia, cholecystitis, spasm associated with peptic ulcer, achalasia, pylorospasm, spasm attendant to diarrhea, spastic conditions of the genitourinary tract attributable to inflammation and calculi, certain primary dysmenorrheas and as an aid in cystoscopic, esophagoscopic and gastroscopic examinations.

PRECAUTION: Caution is recommended when using in hypotensive patients.

SIDE EFFECTS: In common with other smooth muscle depressants, Spacolin temporarily lowers blood pressure.

DOSAGE: One tablet after meals 1 to 3 times daily at discretion of physician. When treating spasm associated with peptic ulcer, achalasia or pylorospasm, administer tablets 1/2 hour before meals. In dysmenorrhea, one tablet 3 times daily starting at onset of discomfort.

SUPPLIED: Bottles of 100 and 500-120 mg. tablets.

*Antacid and dietary measures are of primary importance in ulcer treatment and should not be neglected.

Syncoma, Duphoston, Measles Vaccine, Acusol and Acutus are other significant products for your consideration



Alabama Department of Public Health



THE PHYSICIANS' ROLE IN ABATING DRUG ADDICTION

Dear Fellow Physicians:

As doctors we have a tremendous responsibility in reducing drug addiction in our community and in our state. These comments are offered in an effort to avoid continuing difficulties.

Drug addiction imposes a burden on the individual. Not only does it ruin the patient's physical and emotional health, but it bankrupts his family. Today's addict must spend most of his time scheming to get his drugs and the money to pay for them. As the cost mounts from a few dollars a day to as much as \$75, he impoverishes his family and, typically, resorts to crime. He graduates from petty thievery and prostitution to grand larceny.

Many experts believe that it takes three things to make an addict: a psychologically maladjusted individual, an available drug, and a mechanism for bringing them together.

The psychological maladjustments of an individual are not easily diagnosed or cured. But there are vital parts of the triangle in which the physician has a great responsibility.

The doctor has almost unlimited access to narcotic drugs and other sedatives. With this privilege comes responsibility. Many of us, perhaps, do not realize how easily we may provide the mechanism for bringing the drug and the addict together.

Never leave prescription pads lying around in treatment rooms.

This provides an awesome opportunity for a patient to pick them up and forge a prescription. Recent investigations by both state and federal agents show that Class A prescriptions are frequently forged in Alabama.

A federal narcotic tax stamp is required by federal and state law before narcotics, paregoric, or cough syrups containing codeine may be legally prescribed for our patients.

Never telephone a Class A prescription to a pharmacist. All prescriptions of this nature **MUST** be taken to the pharmacist by the individual for whom the narcotic is prescribed or a member of his immediate family.

All Class A prescriptions **MUST** bear the following information: the complete name and address of the person for whom it is being prescribed and the personal signature of the physician prescribing the drug. In checking pharmacists' records throughout Alabama, investigations have yielded incident after incident in which prescriptions for Class A drugs were filled bearing "jail patient," "doctor's bag," and other equally vague and irregular identifications.

Any suspicious person that comes to your office and specifically requests a narcotic should be reported promptly to the Drug and Narcotic Division of the Alabama Department of Public Health. The only proper method of treatment for an addict is by spe-

(Continued on Page 569)

against the usual gram-negative urinary pathogens

Why use five...where **one** will do?



In a recent 217-patient hospital study,¹ urinary tract infections were treated with a variety of widely prescribed antimicrobial agents including: a sulfonamide (40 patients), chloramphenicol (20 patients), nitrofurantoin (33 patients), nalidixic acid (30 patients), tetracycline (27 patients), colistimethate sodium (22 patients) ... and 2 combinations of 5 agents each (45 patients). The 2 combinations were selected to afford maximal theoretical antibacterial coverage against the usual urinary pathogens. They were (1) tetracycline, chloramphenicol, nitrofurantoin, ristocetin and polymyxin B; and (2) tetracycline, chloramphenicol, erythromycin, nitrofurantoin and colistimethate sodium.

This clinical study shows that the two combinations of antibiotics were not superior to some of their single components. The authors point out that antibiotic antagonism often negates theoretical advantages of multiple therapy. Coly-Mycin Injectable (colistimethate sodium) was one of the single components that was shown to be equal to the combinations and eradicated bacteriuria in two-thirds of the patients.

Theoretical choice of multiple antibacterial therapy has been shown to be no more effective than one well-chosen agent which also offers least patient exposure to possible side reactions, toxicities, allergic manifestations and higher drug costs.

1. McCabe, W. R., and Jackson, G. G.: New England J. Med. 272:1037, 1965.

in gram-negative urinary tract infections often the single well-chosen agent



Coly-Mycin® Injectable (colistimethate sodium)

Indications: Especially indicated for the treatment of severe acute and resistant chronic urinary tract infections due to sensitive strains of gram-negative organisms. Also indicated in respiratory tract, surgical, wound and burn infections and in septicemia due to sensitive organisms. Particularly indicated when any of these infections are caused by sensitive strains of *Pseudomonas aeruginosa*.

Adverse Reactions: Occasional reactions such as circumoral paresthesias, tingling of the extremities, pruritus, vertigo or dizziness may occur. Reduction of dosage may alleviate symptoms. Therapy need not be discontinued, but such patients should be observed with extra care.

Warning: Patients should be cautioned not to drive vehicles or use hazardous machinery while on therapy.

Precautions: In cases of impaired or suspected renal impairment, use with greater caution and reduce dosage in proportion to extent of impairment. Transient elevations of BUN have been reported. As a routine precaution, appropriate blood studies should, therefore, be made during prolonged therapy.

As with all polypeptides, the possibility of muscular weakness, including apnea, due to inadvertent overdosage or normal dosage in the presence of impaired renal function, should not be overlooked. In cases of apnea, medication should be promptly discontinued and assisted respiration given until serum levels fall and normal breathing is restored.

Other antibiotics, such as kanamycin, streptomycin, dihydrostreptomycin, polymyxin, and neomycin, may also have varying neurotoxic or nephrotoxic potential. They should be used with great caution concomitantly with Coly-Mycin Injectable (colistimethate sodium).

For deep intramuscular injection only.

Dosage: By the I.M. route only, in 2 to 4 divided doses ranging from 1.5 to 5 mg./Kg./day (0.7 mg. to 2.3 mg./lb./day). Average adult dose is 2.5 mg./Kg./day (1.1 mg./lb./day). In the presence of bacteremia, septicemia, or other serious infection, greater than average doses may be required; however, maximum daily doses should not exceed 5 mg./Kg. (2.3 mg./lb.) where renal function is normal.

Not recommended against *Proteus*.

Colistin is also available (as colistin sulfate) in: Coly-Mycin® Pediatric for Oral Suspension (not for systemic use), and Coly-Mycin® Otic with Neomycin and Hydrocortisone.

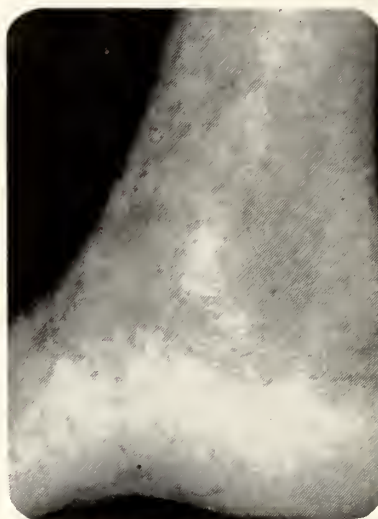
Full information is available on request.



eczema: scourge of childhood



R. R., Age 11—Before treatment—
atopic eczema of long standing



After treatment—with ARISTOCORT
Topical Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of childhood eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side effects are encountered, the drug should be discontinued and appropriate

measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential for spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. General dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for relief of symptoms of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyoderma will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Packages: Tubes of 5 Gm. and 15 Gm.; ½ lb. jar.

PHOTOGRAPHS COURTESY OF M. M. NIERMAN, M.D.

Aristocort® Topical Ointment 0.1% and Cream 0.1%, 0.5%

Triamcinolone Acetonide

Also available in foam form and with neomycin



LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

THE PHYSICIAN'S ROLE

(Continued from Page 565)

cial hospitalization. Out-patient care is not recommended, is peculiarly unsuccessful, and tends to increase addiction rather than effect a cure.

All physicians received the pamphlet "Prescribing and Dispensing of Narcotics Under Harrison Law" with their 1967 narcotic tax stamp. This pamphlet should be studied by every physician in the state and careful attention given to federal and state narcotic requirements.

Self medication with any narcotic must be avoided as a mortal danger.

Only the criminal diverts a drug prescribed for another to his own use and to do so is to obtain the drug by fraud.

It is abundantly evident that the profession and the public are not tolerant of anyone who misuses narcotics.

The medical profession has awakened to its individual problems and public responsibilities and has already initiated discipline of its members.

Discipline begins with restriction on access to narcotics and thus the offender may be salvaged both personally and professionally.

Each of these recommendations must be observed by the medical profession if we are to recognize and fulfill our responsibility in restricting the use of narcotics to legal medical purposes.

Respectfully yours,

Dr. L. Myers M.D.

State Health Officer

Nothing will cook your goose faster than a hot tongue.

* * *

It's entirely possible to make a good sound argument without making a lot of noise.

BUREAU OF VITAL STATISTICS PROVISIONAL BIRTH AND DEATH STATISTICS AND COMPARATIVE DATA

JULY 1966

Ralph W. Roberts, M. S., Director

Live Births Deaths Causes of Death	Number Registered During July 1966			Rates* (Annual Basis)		
	Total	White	Non-White	1966	1965	1964
Live Births	5,680	3,724	1,956	19.0	20.2	23.9
Deaths	2,658	1,716	942	8.9	8.7	8.7
Fetal Deaths	128	58	70	22.0	21.0	20.7
Infant Deaths						
under one month	121	67	54	21.3	23.2	22.5
under one year	153	84	69	26.9	28.5	28.4
Maternal Deaths	2	1	1	3.4	1.6	2.8
Causes of Death						
Tuberculosis, 001-019	26	16	10	8.7	9.8	5.5
Syphilis, 020-029	2	1	1	0.7	1.0	
Dysentery, 045-048					0.3	0.3
Diphtheria, 055						0.3
Whooping cough, 056						
Meningococcal infections, 057					0.3	0.3
Poliomyelitis, 080, 081						
Measles, 085						
Malignant neoplasms, 140-205	332	246	86	11.0	122.1	111.6
Diabetes mellitus, 260	52	28	24	17.4	14.9	14.6
Pellagra, 281						
Vascular lesions of central nervous system, 330-334	374	232	142	125.0	118.7	116.8
Rheumatic fever, 400-402					0.3	0.3
Diseases of the heart, 410-443	880	609	271	294.2	276.1	285.4
Hypertension with heart disease, 440-443	132	50	82	44.1	38.2	38.5
Diseases of the arteries, 450-456	49	34	15	16.4	19.6	22.5
Influenza, 480-483	2	1	1	0.7	0.3	1.4
Pneumonia, all forms, 490-493	60	35	25	20.1	18.3	19.1
Bronchitis, 500-502	8	6	2	2.7	0.7	1.0
Appendicitis, 550-553	3	2	1	1.0		1.0
Intestinal obstruction and hernia, 560, 561, 570	11	9	2	3.7	4.7	5.2
Gastro-enteritis and colitis, under 2, 571.0, 764	5	2	3	1.7	3.0	3.8
Cirrhosis of liver, 581	19	13	6	6.4	4.4	5.2
Diseases of pregnancy and childbirth, 640-689	2	1	1	3.4	1.6	2.8
Congenital malformations, 750-759	26	20	6	4.6	3.7	4.5
Immaturity at birth, 774-776	38	22	16	6.7	6.9	5.9
Accidents, total 800-962	222	154	68	74.2	74.8	67.3
Motor vehicle accidents, 810-835, 960	104	69	35	34.8	42.0	34.3
All other defined causes	402	224	178	134.4	130.6	134.2
Ill-defined and unknown causes, 730-793, 795	145	61	84	48.5	48.0	47.5

*Rates: Birth and death—per 1,000 population
 Infant deaths—per 1,000 live births
 Fetal deaths—per 1,000 deliveries
 Maternal deaths—per 10,000 deliveries
 Deaths from specified causes—per 100,000 population

"Arthritis Drug" Is Dangerous

CHICAGO—Serious, even fatal, side effects are possible from an unlabeled drug that apparently is being brought into this country for the treatment of arthritis, warns the American Medical Association.

Represented to be "dimethyl pyrazalone sulfanilamide," samples of the substance were analyzed by the U. S. Food and Drug Administration to be the drug, dipyrone.

The FDA is investigating reported importation of unlabeled ampules of dipyrone from Mexico, says the Medical News section of the (August 15) Journal of the American Medical Association.

Dipyrone is an analgesic, or pain-killing substance, but it is not approved in the U. S. as a treatment for arthritis. Its use is justified only in rare instances, say the 1966 edition of "New Drugs," published by the AMA Council on Drugs, and a 1964 statement by an FDA committee.

Dipyrone and aminopyrine, from which it is derived, "are capable of causing and have caused fatal agranulocytosis," the FDA report says. Agranulocytosis is a blood disease in which the white blood cell count drops rapidly. Infection then follows.

Other, safer, analgesics that can be legitimately prescribed are effective against arthritis pain.

The investigation is in response to an inquiry from Rep. Otto E. Passman of Louisiana, reported last week in The AMA News. Rep. Passman said the drug is being administered to arthritis victims in at least five southern states by a Mexican physician at Piedras Negras, Mexico.

American physicians have been asked to inject a substance from unlabeled ampules that patients brought from Mexico, the AMA's Department of Investigation has learned. Patients also have been bringing back unlabeled pills containing phenylbuta-

zone (a drug related to dipyrone), and an unidentified pill called a "muscle relaxant."

Dipyrone users told him, Rep. Passman said, that they received "dramatic relief" from arthritis following injections of a drug they knew as "dimethyl pyrazalone sulfanilamide." Rep. Passman said they told him the drug could not be obtained in the U. S., and urged him to see if it could be made available.

Dipyrone is classified as a "new drug" by the FDA, which means it cannot be distributed in interstate commerce nor imported into the U. S. for commercial purposes unless application is made for a specific kind of treatment.

No new drug applications are on file for dipyrone as a treatment for arthritis, nor are there applications for dipyrone's experimental use in this manner, the FDA said.

According to the AMA's "New Drugs," the only medically justified uses of dipyrone may be for treating children's febrile convulsions when other measures and drugs fail, and for controlling fever in Hodgkin's disease and similar malignant diseases when other methods fail.

FDA—Now Hear This!

We do not ask for the repeal of (drug) supervision and control. Rather we ask that the supervision and control be persistent. It seems incongruent that on the one hand, a man may purchase a suicide weapon for 35¢ over the counter of a drug store, while on the other hand producers of ethical pharmaceuticals must remove their products from the market because of an alleged infraction of the safety rules. Consistency and graciousness are needed here—I trust it will be forthcoming from the FDA.—George J. Lytton, MD, in *Greater Kansas City Medical Bulletin*, (61:59), July 23, 1966.

THREE POSTGRADUATE COURSES SCHEDULED FOR PEDIATRICIANS

The American Academy of Pediatrics has scheduled three postgraduate courses for 1966-67, according to E. H. Christopherson, M. D., executive director of the Academy.

Subjects to be covered include allergy and immunology, learning development, progress in understanding the newborn infant, difficult problems in clinical pediatrics—diagnosis and management, and genetics in metabolism.

The programs will be presented Feb. 23-25, 1967, Boston Lying-in Hospital, Boston; March 9-11, 1967, University of Tennessee College of Medicine, Memphis, and March 30-April 1, 1967, Stanford University School of Medicine, Palo Alto, California.

Information concerning registration, housing, and other matters may be obtained by writing Robert G. Frazier, M. D., secretary, American Academy of Pediatrics, P. O. Box 1034, Evanston, Ill. 60204.

Success Without Regulation

The medical profession expects the drug industry to operate in a responsible manner just as the FDA does. It is inconceivable that the present and past record of the drug industry in the United States could have been achieved by any widespread lack of responsibility. It is to be remembered that this record was achieved without absolute governmental regulation. This is a good time for the doctors to come to the defense of the drug industry and to point out to the public the tremendous contribution the industry has made to the health of the nation.—Walter S. Coe, MD, in *Journal of the Kentucky Medical Association*, (64:587), July 1966.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph. D., Director

September 1966

Examination for Intestinal Parasites	1,485
Examination for Malaria	1
Salmonella & Shigella	
(Blood-feces-urine-food)	348
Examination for tubercle bacilli	3,777
Examination for gonococci	2,048
Serological test for syphilis	39,078
FTA	27
Darkfield	1
Brucella	0
General Bacteriology (Cultures for isolation and confirmation)	9
Staphylococcus (cultures for isolation and confirmation)	277
Examinations for diphtheria	23
Streptococci examinations	1,668
Mycology	16
Agglutinations	19
Vincent's infection	1
Complement fixation tests	218
Tests for Phenylketonuria (PKU)	6,641
Cytology	705
Water examination	2,819
Milk and dairy products examinations	4,226
Sea food examinations	174
Examination for Negri bodies (smears & animal inoculation)	307
Virology	37
Rh Factor	672
Miscellaneous	433
TOTAL	65,011

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director

Current Morbidity Statistics

1966

	August	Sept.	*E. E. Sept.
Tuberculosis	94	71	126
Syphilis	173	141	111
Gonorrhea	402	430	334
Chancroid	1	2	2
Typhoid fever	0	0	1
Undulant fever	0	0	0
Amebic dysentery	0	2	4
Scarlet fever & strep. throat	290	376	61
Diphtheria	0	0	2
Whooping cough	2	1	18
Meningitis	10	16	6
Tularemia	0	0	0
Tetanus	0	0	2
Poliomyelitis	0	0	8
Encephalitis	0	0	1
Smallpox	0	0	0
Measles	17	9	29
Chickenpox	20	2	2
Mumps	35	22	13
Infectious Hepatitis	18	16	39
Typhus fever	0	0	1
Malaria	0	3	0
Cancer	906	598	646
Pellagra	0	0	0
Rheumatic fever	21	13	12
Rheumatic heart	19	19	24
Influenza	6	23	31
Pneumonia	135	141	124
Rabies—Human cases	0	0	0
Pos. animal heads	1	3	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

"'Tranquilizer' is not a good word"

THIS classification is psychologically too seductive, pharmacologically too unspecific, and in terms of results not infrequently untrue."²

What is a tranquilizer? According to the 24th Edition of Dorland's Medical Dictionary³ a tranquilizer is "an agent which acts on the emotional state, quieting or calming the patient without affecting clarity of consciousness."

Defining a drug by its effects, however, can be misleading. The same effects by which the dictionary defines a tranquilizer have sometimes been seen after administration of a sedative — or, for that matter, a placebo.

Ambiguous though the term may be, it appears to be here to stay. The 1966 edition of the Physicians' Desk Reference⁴ lists 42 tranquilizers indicated for treatment of anxiety and apprehensive states.

'Tranquilizers' have differences in action, differences in effect

Although all tranquilizers are intended to calm anxious patients there are differences in their actions — and in their effects. They have been divided into three categories — the rauwolfia group, the 'minor' tranquilizers, and the phenothiazines.⁵

Although the tranquilizing effect of rauwolfia has been known for centuries, its use as an antipsychotic agent in current practice has diminished.⁵

A 'minor' tranquilizer is often prescribed to achieve more than one effect. Thus, besides being tranquilizers some of these compounds may be muscle relaxants, antihistaminics with some calming action, anticholinergic sedatives, or antispasmodics.⁵

The phenothiazines are considered 'major' tranquilizers because they alter psychotic behavior.¹ This classification may have done them more harm than good because it implies that the phenothiazines should be reserved for the more

severely disturbed. This is not necessarily true.

The phenothiazines — and the problem of sedation

One of the problems of prescribing phenothiazines for ambulatory patients has been the fear that excessive sedation will impair the patient's ability to function. This, however, is less of a problem with some of the phenothiazines.

"Clinically they may be differentiated primarily in terms of their potency and the extent of their sedative effect, which appear to be inversely proportional. That is, the least potent, the one which is used in highest dosage, chlorpromazine, is the most sedative, while the reverse holds true for fluphenazine."⁶

In a recent report on various studies conducted over several years evaluating 360 patients treated for anxiety and stress with seven phenothiazines, this inverse relationship of potency to sedation was confirmed.⁷ Also under consideration was the degree to which the particular phenothiazines neutralized anxiety (the angolytic index). Interestingly enough there was, again, an inverse relationship. The most sedative of the phenothiazines appeared to be the least active in neutralizing anxiety. Fluphenazine

phenazine, one of the least sedative, on the other hand, was found to be most effective in relieving anxiety.⁷

RELATIVE SEDATIVE AND ANGOLYTIC INDICES OF PRINCIPAL PHENOTHIAZINES*

DRUG	SEDATIVE INDEX	ANGOLYTIC INDEX	BASED ON STANDARD DOSE OF
Chlorpromazine	100	15	25 mgs.
Trifluoperazine	100	15	25 mgs.
Thioridazine	90	17	25 mgs.
Perphenazine	15	25	4 mgs.
Carphenazine	25	25	25 mgs.
Trifluoperazine	3.3	95	2.0 mg
Fluphenazine	3.5	100	2.5 mg

*adapted from Sainz⁷

Prolixin is therapeutically effective without excessive sedation

When used as a 'tranquilizer' in general medical practice, in many patients Prolixin (Squibb Fluphenazine Hydrochloride) suppresses anxiety, but not normal activity. These two features are of particular importance to patients who must be able to live and work without their normal daily activities being restricted.

Because of its longer duration of action, Prolixin, in doses of as little as one to three milligrams in adults, generally taken once a day, is effective in maintaining many patients free of their symptoms of anxiety and tension.

Contraindications: Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use with caution in patients with a history of convulsive disorders. Severe reactions may occur in patients with idiosyncrasy to other centrally-acting drugs, and severe hypotension may occur in patients with special medical disorders, e.g. mitral insufficiency and pheochromocytoma.

Precautions: Effects of atropine, anesthetics and C.N.S. depressants may be potentiated. Hypotension may occur in patients undergoing surgery. Do not use epinephrine for treatment of the hypotensive reactions which may appear in patients on phenothiazine therapy.

Side Effects: Extrapyramidal reactions, allergic skin reactions, the possibility of anaphylaxis, drowsiness, visual blurring, dizziness, insomnia, nausea, anorexia, salivation, edema, perspiration, dry

mouth, abnormal lactation, polyuria, hypotension and jaundice and biliary stasis may occur. Roentgen blood counts are recommended to determine possible blood dyscrasias; if symptoms of upper respiratory infection occur, discontinue drug and institute appropriate therapy.

Available: 1 mg. tablets. Bottles of 50 and 500

For full prescribing information, see package insert


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BLUE SHIELD—A PHYSICIAN'S VIEWPOINT

Charles L. Hudson, M. D.

President, American Medical Association

Let me assure you of the pleasure I feel in being invited to appear before you, representing as you do, the Blue Shield plans of the country. Certainly, as an admirer of what you have accomplished in the past and as a former appointee from the American Medical Association to your board of directors, I do not feel strange among you.

My talk will be personal and quite informal—the reminiscences of a particular physician. I acknowledge that I am not sufficiently well informed to discuss the technicalities of prepayment or of insurance in any detail. Historical material has been covered well. And so, I will give you rather frankly a review of my own experiences with "The Blues" and then a forward look at my expectations for the place of Blue Shield in the future.

I cannot resist repetition of what you well appreciate, that Blue Shield's basic concept came from the physicians' own organization, the AMA. Its early standards, its organizational principles and development were formulated and nurtured by the AMA. Physicians helped to finance and direct the local plans and to underwrite them with their services. Physicians continue to donate their time and energy to the local and national organizations of the Blues. Truly then, you have the fair claim to recognition as "The Doctors' Plan."

And yet by the title of my talk and with this disclaimer, I do not pretend to speak



Dr. Charles L. Hudson

for all physicians nor for the AMA. Nor do I feel it is expected of me.

My recollection of 30 years ago in the depression years is of a distressed, poverty stricken people. Hospital out-patient visits if collected for at all were priced at 25¢. Health insurance, limited as it was, seemed to exclude for payment most of the disorders common to our outpatient load.

I can still hear my own voice advising the purchase, where feasible, of the new insurance, "The Blues." It had a unique philosophy that embraced the whole community. It provided not only for the preferred risks, but included those whose need was greatest and whose pocketbooks were slimmest.

Modest premiums within reach of the poor provided modest indemnification of illness.

(Continued on Page 578)

Presented at Annual Program Conference, National Association of Blue Shield Plans, The Drake Hotel, Chicago, Illinois, October 10, 1966.



The “Socio-geographic” mystery

Why is one man's gastric ulcer another man's duodenal?



Geographic variation in the incidence of peptic ulcer is a familiar fact. But the proclivity of certain kinds of ulcer for certain geographic areas is a recently recognized phenomenon.^{1,2}

For example, in one particular Norwegian fishing village there is a tendency for patients to develop a gastric ulcer; anywhere else in Norway, ulcers are usually duodenal. Peruvians high in the Andes have more gastric ulcers than their compatriots in the lowlands. Why? Nobody knows.

Social variations, too. Even in the same geographic areas there are interesting variations. An Englishman's ulcer depends on his social standing—professional men suffer with duodenal ulcers, while workingmen have more of the gastric variety. In southern India the pattern is reversed. Here, duodenal ulcers are common among laborers and agricultural workers and rare among the upper classes.

Investigators are exploring every possible theoretical avenue in their search for the cause of peptic ulcer. Of all the factors implicated in ulcerogenesis, the one that is generally acknowledged to be of primary importance is hypersecretion of gastric acid.³⁻⁸ Or, as one author states it: "The medical management of peptic ulcer pharmacologically is, in the final analysis, concerned largely with the effective inhibition of peptic activity."³

Robinul (glycopyrrolate) provides potent, rapid, specific antisecretory action as confirmed by gastric analyses and x-ray evidence of clinical effectiveness.^{3,7,9-12} It relieves pain with "impressive" promptness.⁸ Quickly alleviates acute discomfort, and effectively counteracts gnawing pain, preprandial midepigastric pain, belching and other ulcer symptoms.⁷ Suppression of nocturnal pain is "outstanding."¹³ Maximally effective doses may be given with minimal side effects, and the incidence of unwanted anticholinergic effects is negligible.^{3,7-14}

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Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Dosage should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet 3 times a day: in the a.m., early p.m., and at bedtime. *See product literature for full prescribing information.*

Supply: Robinul (glycopyrrolate 1 mg.); Robinul Forte (glycopyrrolate 2 mg.); Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming.) In bottles of 100 and 500 scored tablets.

References: 1. Jones, F. A., and Gummer, J. W. P.: Clinical gastroenterology, Springfield, Ill., Charles C Thomas, 1960, pp. 322-3. 2. Bockus, H. L.: Gastroenterology, 2nd ed., vol. 1, Philadelphia, Saunders, 1963, p. 468. 3. Sun, D. C. H.: Ann NY Acad Sci 99:153 (Feb. 28) 1962. 4. Moore, V. A.: Postgrad Med 38:216 (Sept.) 1965. 5. Dragstedt, L. R., Woodward, E. R., Storer, E. H., Oberhelman, H. A., Jr., and Smith, C. A.: Ann Surg 132:626 (Oct.) 1950. 6. Posey, E. L., Jr., Smith, P., Turner, C., and Aldridge, J.: Amer J Dig Dis 10:399 (May) 1965. 7. Lamphier, T. A., Siegel, L., and Goldberg, R. I.: Amer J Gastroent 37:551 (May) 1962. 8. Kasich, A. M., and Fein, H. D.: Ibid 39:61 (Jan.) 1963. 9. Epstein, J. H.: Ibid 37:295 (Mar.) 1962. 10. Moeller, H. C.: Ann NY Acad Sci 99:158 (Feb. 28) 1962. 11. Slinger, A.: J New Drugs 2:215 (Jul.-Aug.) 1962. 12. Barman, M. L., and Larson, R. K.: Amer J Med Sci 246:325 (Sept.) 1963. 13. Shutkin, M. W.: Amer J Gastroent 38:682 (Dec.) 1962. 14. Fleshler, B.: J New Drugs 2:211 (Jul.-Aug.) 1962. **A. H. ROBINS CO., INC.**
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BLUE SHIELD

(Continued from Page 575)

I do not need to tell you that. But by the time I had returned from army service overseas ten years later (20 years ago by your timetable) The Blues had grown and were becoming much more sophisticated.

War production had wakened industry from its ten year siesta. Groups of laborers had joined your plans. Demands arose for more benefits to be incorporated into the programs, then and subsequently, negotiated into labor contracts as fringe benefits or in lieu of wages.

In our area as in others, Blue Shield tended to exist in a position subordinate to Blue Cross. Perhaps it was because of a priority of organization, or the early predominance of hospitalization as the service need or a preponderance of numbers of contract holders or something to do with marketing . . . That Blue Cross appeared to have the stronger contract with the growing market for health service financing. Then, as the financing of physicians' services was demanded and provided, these services were added to the Blue Cross contract—for the above reasons and also in the pragmatic tactic of limiting financial responsibility by the requirement of hospitalization to receive the benefit.

The number of physicians whose remuneration was thus tied to the Hospital was limited. But in anticipation of present growth in their numbers, physicians recommended the transfer of coverage of their services from Blue Cross to Blue Shield. However, our best efforts to effect this transfer have been ineffectual and the problem has remained alive to plague us and to become heightened with medicare. The federal government has appeared as a source of funds. Physicians and hospitals are in familiar roles and Blue Cross and Blue Shield have changed their names to intermediary and carrier respectively.

I have departed from the proper chronology I realize and to return I'd like to react to the

development of the service or paid-in-full principle as I did at its inception.

I appreciate the ease of administration of indemnity programs and believe further that in most instances, indemnification has kept pace with rising costs and covers the needs of most. However, to reassure the low income family by making health expenses predictable if not in fact limited and to strengthen Blue Shield in the market, many of us helped in the development of the service policy. In our "Academy Plan" of the County Medical Society, our agreement to provide a service for a specified fee was made with the society which in turn offered not only to Blue Shield but to insurance companies assurances that policies could be sold and services would be provided. For practical purposes Blue Shield is alone in the field in that location.

I wish to mention that many of my colleagues in Ohio and elsewhere do not accept the service principle and hold under suspicion relative value scales and professional service indices.

My personal support of the service idea is limited however, to the low income individuals where it can be truly said that their ability to pay for health services is marginal and where other approaches such as deductibles and co-insurance would hit them hard.

"Low," I appreciate, is a word that must be qualified wherein the determination of income limits for eligibility for benefits is difficult. Any preference for indemnity as I believe, is based on administrative considerations rather than love of the Robin Hood approach. Physicians who expect to provide continuity of care cannot overcharge for any reason with impunity and freedom.

I understand that you are experimenting with a no-income-level service benefit program. I would not favor such a proposal. Not that I would fear inadequate remuneration but because it is an unnecessary and unfair restriction on the efforts of our group to work freely in the market place. Predictability of cost of health services is vital to the

low income group. To the well to do it has no more significance than an unpredicted rise in the price of food, clothing or automobiles.

I would now like to move toward the present and future by offering some suggestions:

1. I would like to see the financing of physicians services placed in the proper contract based on reason rather than for any devious purpose. In the past we seem to have lacked flexibility and adaptability. If a physician wishes to practice without salary from a hospital and the hospital agrees to permit him to do so, he should be able to appeal to his patients for remuneration as do other physicians. This is permitted under Medicare. The patient should be able if he wishes to purchase coverage for this expense, through Blue Shield premiums and without duplication in Blue Cross premiums.

2. We must be conscious of costs. Comprehensive care eludes definition. Provisions of service or facility should be adequate but not lavish. Patients and physicians should develop a responsibility that minimizes requests for services, drugs and appliances (as well as hospitalization) that are demanded merely because financing mechanisms have made them more convenient of acquisition.

3. Plans should continue the difficult consideration of prepayment or insurance for ambulant Care. Legitimate increases of the price of hospitalization may well force a reversal of the pilgrimage to the hospital for services that can be provided elsewhere.

4. Principles of prepayment and of insurance should be explained honestly to the public. Unfortunate presentations even with medicare, engender feelings of equity and entitlement that often can not be satisfied. Physicians feel that they bear the brunt of policing some programs and are understandably reluctant to take the full responsibility.

5. Experimentation in the development of new forms of insurance and coordination of

(Continued on Page 580)

the new and the old is expected of you, and hopefully will continue.

I will conclude with a subject I need not cover in detail today. Let me say that my colleagues and I are well aware of the vital role you have played in the preparations for medicare. This is in keeping with the responsibilities of a free society—the voluntary interaction with our government.

Private enterprise and freedom of the individual have no stronger champion than I. But with many others I recognize that government has its rightful place, just as our private organizations have theirs.

Your new relationship with government has cast you in a new role with independent functions, looking to government and to the people, acting as a buffer between them. We pray that you will appreciate the significance of your position; we hope that with our assistance you will jealously guard it.

Your position vis a vis the medical profession is a sensitive one as you are aware. Your assumption of responsibility has placed you in conflict with some of us that you serve. Determination of a reasonable charge by whatever formula you use will not always be easy. But remember this is your prerogative not to be dictated from any direction.

PL 89-97 gives you responsibility to appraise the effectiveness of utilization review. Rather than policing, your efforts to assist physicians and hospitals will be rewarding. Certification of initial and continuing hospitalization is a contentious subject at this time. You can be helpful here in ascertaining that the objective of this activity relates to quality of health care rather than to claims adjustment.

This is but a token list of the ways you can be helpful under Medicare. In addition your executive vice president, Mr. John W. Castellucci, has recently pointed out in your newspaper in reference to Title XIX that here is another opportunity for Blue Shield to dem-

onstrate that "... there is no reason for government to attempt to provide health care through its own agencies."

Just as the AMA recommended that you take active part in the administration of Title XVIII, so now will we recommend that you act as carriers for Title XIX if and when they are authorized.

I am sure you are prepared for that job. I salute your support of the private sector and your efforts to preserve the traditional forms of health care provision. And I will conclude on that note.

We cannot relax or be complacent. We must continually strive to prove and improve our competence in the scientific aspects of medicine and in its distribution. We must work harder than ever to show the American people that the voluntary way, the private delivery of health care is supreme.

16TH ANNUAL HEART SYMPOSIUM

JANUARY 28, 1967

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MEDICAID LAW CAUSES PUBLIC FUROR

On April 30th of this year Governor Rockefeller signed into law what became Chapters 256 and 257 of the Laws of 1966, better known as the Medicaid Law, which was the implementation by New York State of Title XIX of the Social Security Act. Although there was practically no comment from the public with respect to Medicaid prior to its enactment, almost immediately after the bill became law the public outcry began and continued until it reached, especially in the upstate areas of the State, heights of outrage never before heard in connection with any legislative enactment. It was rumored that the upstate Senator who was the floor leader of the bill remained in Albany in the State Capitol over the Memorial Day weekend because he was afraid to go home and face his angry constituents. The story was that there was a steady stream of people driving in front of his house blowing their horns and pointing menacing fingers.

Of course, reaction to the bill was not all negative. In certain quarters it was hailed as the greatest piece of social legislation ever passed by the New York State Legislature. However, one prominent legislator who had voted for the law privately admitted that in his opinion it was "the biggest legislative goof in two centuries."

What caused this furor?

The benefits furnished under the bill are broad. It cover (1) services of physicians, dentists, nurses, optometrists, podiatrists, and other related professional personnel, (2) care in hospitals, nursing homes, infirmaries

and other eligible medical institutions, (3) out-patient hospital or clinic services in facilities operated in accordance with the law, (4) home health care services, including home nursing services and services of home aids, (5) drugs, sick room supplies, eye glasses, dentures, prosthetic appliances, (6) physical therapy and rehabilitative services, (7) laboratory and x-ray services, and (8) as frosting on the Medicaid cake, transportation necessary to obtain the care and services provided by the law.

Although the law covers every medical need a person could require, the comprehensiveness of the coverage was not really the reason for all the excitement. What caused all the clamor was the estimate of the number of people who would be eligible to obtain benefits under the bill, and the projected cost of the program. Income limits for determining eligibility are not set forth in the Medicaid Law. Determination of income criteria for eligibility is delegated by the law to the Board of Social Welfare of the State of New York.

Prior to the passage of the Medicaid Law, the Democratic leadership of the Democratic controlled New York State Assembly (which is one of the two Houses of the State Legislature) and the Republican administration had become involved in a dispute concerning the income limits under the bill. The Democrats wanted higher income limits than those proposed by Republicans. Governor Rockefeller and the Democratic leadership finally compromised and the income limits agreed upon under the compromise were later adopted by the Board of Social Welfare as the criteria for eligibility for benefits under the law.

The income limits so approved are on a sliding scale depending on the number of persons in a family and the number of wage

(Continued on Page 585)

*Joseph Boochever, LL.B., an attorney for Blue Shield and Blue Cross in New York State, addressing the Annual Program Conference of the National Association of Blue Shield Plans in Chicago on October 11.



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Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on

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*Miller, J. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

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Codeine phosphate 1/4 gr. (No. 2),
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(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation and drowsiness have been reported.

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THE NEW YORK STORY

(Continued from Page 582)

earners in the family. The scale goes from a net income of \$2,900.00 for one person to a net income of \$7,700.00 for a family of six with one wage earner. For each additional person in the family the income limit increases by \$850.00. A family of four with one wage earner, which is the size of family usually used as a standard, is eligible for Medicaid benefits if its annual net income does not exceed \$6,000. One important feature is that net income under the Medicaid Law is defined as gross income less income taxes, health insurance premiums, and payments made pursuant to a court order.

The law also exempts from consideration in determining financial eligibility a home-stead, essential personal property and resources of \$1,000.00 for each person as a burial reserve. In addition, a family may retain savings equal to one-half of the net income limit applicable to the family and still be eligible for Medicaid benefits. However, no person is eligible if he has life insurance in a face amount in excess of \$1,000.00. The law also contains a provision that, in the event of catastrophic illness, a person is eligible for benefits when the cost of such illness reaches 50% of the annual net income of such person.

The original estimates with respect to how many people in the State of New York would qualify for coverage under the income criteria promulgated by the Board of Social Welfare varied between six million and eight million. This would include between 40% and 50% of the population of the State. Because of the controversy which had been generated by the passage of the Medicaid bill, a public hearing was held in Albany on May 24th by the New York State Joint Legislative Committee on Problems of Public Health and Medicare to consider the Medicaid statute which had become law less than a month previously. I might say that this was the only time in anyone's memory that a New York State Legislative Committee held a hearing on a bill which had already been passed by the Legislature.

The hearing began at ten o'clock in the morning and continued, without a break for lunch, dinner, or any other purpose, until ten o'clock that night. The Governor, the Commissioner of Social Welfare, the Chairman of the Board of Social Welfare, and the Commissioner of Health all appeared and made statements. In addition, representatives of medical societies, industry, hospitals, insurance companies, optometric societies, dental societies, pharmaceutical societies, psychological societies, chiropractic societies, senior citizens organizations, and social service agencies also testified. In all, about 70 people spoke that long day. An indication of the public interest in the hearing, at least in the upstate areas of New York, was the fact that television stations in Syracuse and Buffalo broadcast the hearings live for the entire twelve hours.

At the hearing Governor Rockefeller stated that the estimated cost of the Medicaid program to New York State, for the fiscal year ending March 31, 1967, would be 532 million dollars, compared with 449 million dollars which had been spent in New York State for medical care under various welfare programs during the preceding fiscal year. He said it was anticipated that two million people would receive benefits under the new Medicaid program for the current fiscal year as compared with one and one-half million people who had received medical assistance under welfare programs in the preceding fiscal year.

The Governor made no projections of cost beyond the current fiscal year. He emphasized, however, that where the State of New York and its units of local government had received only 79 million dollars in federal aid toward the 449 million dollars spent in the previous fiscal year, under the new Medicaid Law the federal government would now contribute 217 million dollars toward the estimated 532 million dollars to be spent in the current fiscal year. The degree of joyfulness of the Governor in announcing this bonanza was probably matched only by the

(Continued on Page 587)

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THE NEW YORK STORY

(Continued from Page 585)

degree of sadness of Mr. Wilbur Mills, Chairman of the House Ways and Means Committee, when he heard of this estimate for federal reimbursement in New York State alone.

Governor Rockefeller and the other officials of the New York State government who appeared at the hearing seemed, however, to be somewhat on the horns of a dilemma. On the one hand, in order not to alarm the general public (any more than it had already been alarmed) about the possible future cost of the Medicaid program, some state officials testified that the program was no more than a moderate extension of existing state welfare programs which would now permit the state to obtain greater federal reimbursement. Other state officials, unable to resist the temptation of stressing the magnitude of the program, stated that it was, in effect, a radical departure from previous welfare programs and constituted the most important piece of social legislation ever passed by the New York State Legislature. If my memory serves me, I believe one state official took both approaches at the same time. The question left unanswered at the hearing was, however, "Is it a welfare program, or is it a health program?"

After the public hearing, the rush was on to amend the Medicaid Law. An actuarial study made by the New York State Blue Cross and Blue Shield Plans projected an annual cost to New York State, before any federal reimbursement, of 1.4 billion dollars for the program when it became fully implemented. A similar study made by the commercial insurance industry projected the cost at 1.6 billion dollars annually. From what I have read in the newspapers, the actuaries for the Department of Health, Education and Welfare have now projected the cost of the New York State program at 1.4 billion dollars. This is a nice compliment to the accuracy of our own Blue Cross and Blue Shield actuaries.

Despite the growing realization that the

Medicaid program could in subsequent years cost between two and one-half to three times the amount of the Governor's projection for the first year, the Democratic leadership in the New York State Assembly remained adamant against any changes in the statute. Their attitude was "Let's give it a chance and see how it works; we can always amend it next year." The Governor's office did not have much to say publicly about amendments, but the rumor became pretty well known that the Republican administration would welcome some changes. In the closing days of the Legislature, ten bills were introduced to amend the Medicaid Law. All ten of these measures were passed in the Republican-controlled Senate, but Mr. Travia, the Democratic leader in the State Assembly would permit only four of them to be passed in that House. These were signed by the Governor and ultimately became law.

One amendment provides that, unless an applicant under the Medicaid Law grants permission to the local public welfare officials to conduct an investigation of his financial resources, benefits under Medicaid may be suspended or denied. Strange as it might seem, although the original Medicaid Law provided that an applicant for assistance must furnish a financial statement, in effect it prohibited public welfare officials from verifying the truth of the information given by the applicant. This amendment plugged that loophole.

Another amendment gives public welfare officials a lien against any recovery in a lawsuit for personal injuries by a recipient of Medicaid benefits for the amount of such benefits paid on account of the injuries.

The third amendment provides that an applicant for, or recipient of, medical assistance must advise his local public welfare district of any change in his financial condition or income and that, if he is no longer eligible for benefits under Medicaid, he must surrender his Medicaid identification card.

The fourth amendment, and the one which

(Continued on Page 590)

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<i>Salmonella choleraesuis</i>	<i>Salmonella derby</i>
<i>Salmonella enteritidis</i>	

Proper antibacterial therapy for individual cases should help in reducing the total number of cases in an epidemic situation.

Side effects are infrequent. A few hypersensitivity reactions to Furoxone have been reported including a fall in blood pressure, urticaria, fever, arthralgia and a vesicular or morbilliform rash. These reactions subsided promptly following withdrawal of the drug. Primaquine-sensitive patients may develop a mild reversible hemolytic anemia. Nausea, emesis, headache or malaise may occur occasionally. To obviate alcohol-disulfiram type reactions, advise against use of alcohol-containing drugs during therapy and four days thereafter.

Do not give to infants under one month of age.

Composition: Furoxone Liquid contains, per 15 cc. tablespoonful, furazolidone 50 mg., pectin 225 mg., and kaolin 3.0 Gm. Furoxone Tablets each contain 100 mg. of furazolidone.

References: 1. Editorial: J.A.M.A. 189:691 (Aug. 31) 1964. 2. Foertsch, J. H.: J. Oklahoma Med. Assn. 57:449 (Oct.) 1964. 3. Paul, H. E., and Paul, M. F.: The Nitrofurans—Chemotherapeutic Properties, in Schnitzer, R. J., and Hawking, F. (Eds.) Experimental Chemotherapy, Vol. 2, New York, Academic Press, 1964.

Originators and Developers of The Nitrofurans
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THE NEW YORK STORY

(Continued from Page 587)

received the most publicity, was one which incorporates a deductible provision into the Medicaid Law. The deductible applies to outpatient service only and is applicable only to families having an annual gross income of \$4,500.00 or more. The deductible is the lesser of (1) 1% of the annual gross income of the family or (2) 5% of that portion of the net annual income of the family which exceeds 80% of the appropriate maximum income exemption for the family. Suffice to say, the second method of determining the deductible is complicated and, in many cases, results in a zero figure. In that case, no deductible is imposed at all. No one has assembled figures to show the estimated saving from inclusion of the deductible provision. The prevailing feeling is that it will probably cost more to administer than the money it will save.

One other bill, which passed the New York State Legislature in its closing hours, should be noted. Although it was not an amendment to the Medicaid Law as such, that bill amended the General Municipal Law of the State of New York to make it possible for Blue Cross, Blue Shield, other non-profit health insurance corporations, and commercial insurance carriers to act as fiscal intermediaries for local public welfare districts in administering the Medicaid Law.

One proposed amendment to the Medicaid Law, which did not receive favorable consideration by the Legislature, is of particular interest to this group. That amendment provided for the free choice by an applicant for Medicaid benefits of a physician and for free choice of a hospital or nursing home. While this bill failed of passage in the Legislature, the Board of Social Welfare, largely because of the insistence by the New York State Medical Society that free choice of physician and hospital is essential if the Medicaid Law is to work at all, has since promulgated a rule under the Medicaid Law which provides for such free choice. The Board of Social Welfare felt that such a rule

was necessary to insure proper implementation of the medical assistance program and high quality of medical services.

There is one problem under the New York State Medicaid Law which is of vital importance to the medical profession and which has not as yet been finally resolved. While the Medicaid bill was pending and subsequent to its passage, an interdepartmental task force composed of representatives of the New York State Department of Health, the New York State Department of Social Welfare, and the New York State Division of the Budget worked with representatives of the New York State Medical Society in an attempt to develop a fee schedule under the Medicaid Law which would be satisfactory to both the state and the medical society. The medical society proposed that fees paid under the Medicaid Law be determined in the same manner as fees paid by a carrier under Title XVIII of the Social Security Act, and that the State consider using carriers as intermediaries to administer payments to physicians under the Medicaid Law.

The task force has not, up to the present time, accepted the recommendations of the medical society. Instead, it recommended as a transitional fee schedule a relative value schedule with a conversion factor of \$5.00 for medicine and \$4.00 for surgery. This schedule was adopted by the New York State Department of Social Welfare as the maximum schedule under which a local welfare district may seek reimbursement from the State. This does not, however, preclude a local welfare district from paying at a rate lower than the one in the schedule adopted by the State. Whether this transitional fee schedule will give way to a statewide mandated schedule which approaches customary and usual charges only time will tell.

As all of you are undoubtedly aware, the medical assistance program contained in the New York State Medicaid Law has not as yet been approved by the federal Department of

(Continued on Page 592)



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

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THE NEW YORK STORY

(Continued from Page 590)

Health, Education and Welfare. Inasmuch as Governor Rockefeller's estimate—which many people feel is low—of the federal reimbursement toward the cost of the New York program for the first year is almost as much as the Congress intended to spend for the entire country under Title XIX, the House Ways and Means Committee has been considering amendments to Title XIX in an attempt to reduce the cost to the federal government. The two amendments most frequently reported are (1) incorporation of an income eligibility limit in Title XIX lower than what the New York program now has, and (2) placing a specific dollar limitation on the amount of federal reimbursement which each state could receive. If either of these amendments are adopted, the impact on the New York State Medicaid program could be dramatic. New York State would either have to cut back its program, or to bear, without federal reimbursement, a much larger portion of the cost. This is so because the New York State Medicaid Law is not contingent

upon approval of the medical assistance program contained in it by the Department of Health, Education and Welfare.

As of now, the New York State Medicaid program has not really gotten off the ground. We understand that case loads of local welfare departments for medically indigent persons have not increased appreciably. This, however, can be attributed to the newness of the program, the confusion of local public welfare districts with respect to fee schedules and free choice of physicians, and the publicity concerning the failure of the Department of Health, Education and Welfare to approve the New York plan. Knowledgeable people seem to agree that, if the program is not modified, the cost projections will be realized within a relatively short time.

What I have outlined here today is only the first chapter of the New York Medicaid story. If the Department of Health, Education and Welfare does not approve the program, or Title XIX is amended to limit the scope of federal reimbursement, the second chapter may prove to be even more intriguing than the first.

Supplemental Sex Education Urged

Schools and communities are urged to take more responsibility in supplementing the home in teaching facts about sexual reproduction and the values of the family system in a recent statement of the Joint Committee on Health Problems in Education.

Recognizing that preventive measures such as better sex instruction by parents and schools "will be slow in effecting results" with respect to the problem of early and unwanted pregnancies, the Committee re-emphasized its statement of 1963 urging schools

and communities to "devise a plan for the continued education for married students and unwed parents."

The Committee has been a cooperative effort for the past 54 years of the National Education Association and the American Medical Association.

In another statement, the Committee cautioned schools and colleges against using hypnosis as a form of entertainment, and recommended that students should be discouraged from practicing hypnosis.



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requiring mental alertness while taking this agent. Bacterial or mycotic superinfection may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be performed initially and monthly for three months. **Adverse Reactions:** Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis and allergic reactions may occur. **Usual Adult Dose:** Two capsules q.i.d. Continue therapy for at least 10 days in beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. **Supplied:** Bottles of 24 and 100.

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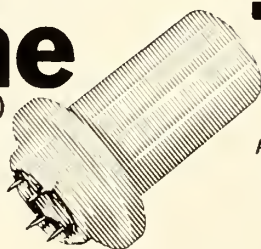
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Motion Picture Offered For Recruiting Purposes

A new motion picture designed to help alleviate the critical doctor shortage was premiered October 10 at the Annual Scientific Assembly of the American Academy of General Practice (AAGP) at Boston.

"Someone You Can Trust—Someone You Can Be", a 29 minute color film, encourages high school students to consider a career as a medical doctor. The film was produced for the AAGP by Smith Kline & French Laboratories, the Philadelphia pharmaceutical firm. It is designed for use in the Academy's new physician recruiting effort: the Family Practice Careers program.

According to AAGP Executive Secretary Mac Cahal, "Someone You Can Trust—Someone You Can Be" is part of an on-going effort to help solve the physician shortage facing this country. Cahal points to some statistics that reveal the extent of the problem.

"In 1900, there were 150 doctors for every 100,000 population; today there are but 130", Cahal said. "Despite the fact that each day headlines proclaim new medical miracles, nearly 20 per cent of the medical internships available at U. S. hospitals go unfilled each year. Medicare and other government health programs will further increase the need for trained physicians."

The AAGP started medical career recruiting efforts in 1961 with its Project MORE, a widely successful program that has been responsible for greatly increased efforts of this kind by the entire profession. Project MORE, which is implemented by physicians in their local communities, now has been incorporated into the broader Family Practice Careers program. The new program covers college pre-med and medical school as well as high school. Its goal is attracting more young doctors into family medical practice.

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AMA PUSHES BETTER SERVICES TO UPGRADE MEDICAL CARE

CHICAGO (AP) — The American Medical Association, contending that too many patients are "dying from want of fast and appropriate action," announced plans Tuesday aimed at a vast upgrading of emergency medical care in the United States.

"A soldier wounded in the jungle of Viet Nam often gets quicker, more comprehensive emergency care than an accident victim on the open highway or a farmer stricken by a heart attack," said Dr. Charles C. Edwards, director of the AMA division of socioeconomic activities.

He said that with hospital emergency room visits up 175 per cent in a 10-year period, over-all services and facilities "have fallen woefully behind."

CORONARY DRUG STUDY UNDERTAKEN BY EMORY

Part of a nationwide study to determine which of five drugs is best in treating patients who have suffered at least one heart attack is underway at Grady Memorial Hospital.

The Department of Medicine, Emory University School of Medicine, received a grant of \$71,074 from the National Institutes of Health for the initial year of a planned seven-year coronary drug project. The initial grant covers the year beginning June 1, 1966.

Dr. J. Willis Hurst is chairman of the department, and Dr. Robert C. Schlant, associate professor of internal medicine, Emory University School of Medicine, is director of the project. It will be conducted with in-patient and out-patient volunteers at Grady Memorial Hospital, where the school conducts the major portion of its clinical teaching program.

The study at Grady is part of a nationwide undertaking which is eventually expected to embrace approximately 50 institutions and about 7-8,000 patients.

"We know that emergency service can be excellent," he said. "This has been proven in many communities. But there is no uniformity. In other areas emergency service suffers from both lack of coordination and lack of understanding about what constitutes good care."

Acting on recommendation of its Board of Trustees, the AMA has called together a panel of experts to help organize a national conference next spring that will study and recommend means for improving emergency medical care.

Edwards said one of the conference's principal tasks will be to unify work of such groups as the American College of Surgeons Trauma Committee and the AMA Council on Rural Health, Department of Health Education, and Department of Hospitals and Medical Facilities.

Principal Areas

He said the conference will delve into these principal areas:

—Ambulance service and the training of ambulance personnel.

—The operation, staffing and equipping of hospital emergency facilities.

—Improved medical education in emergency procedures.

—Further research into the causes and prevention of medical emergencies, whether the result of accident or disease.

"These add up to the fact that nationwide too many emergency patients are dying from want of fast and appropriate action—either because their would-be rescuers are inept or because health care facilities are inadequate," he said.

He said many ambulance drivers "don't even know the rudiments of first aid."

—Reprinted from *The Huntsville Times*

**SELECTED TYPHOID
IMMUNIZATION URGED**

Surgeon General William H. Stewart of the Public Health Service observes that routine typhoid immunization is *not* recommended in the United States. His statement was based on findings of the Public Health Service Advisory Committee on Immunization Practices.

The Committee recommended selective immunization in the following situations:

- (1) Intimate exposure to a known typhoid carrier as would occur with continued household contact.
- (2) Community or institutional outbreaks of typhoid fever.
- (3) Foreign travel to areas where typhoid fever is endemic.

The Advisory Committee stated further, "Although typhoid vaccine has been suggested for individuals attending summer camps or those in areas where flooding has occurred, there are no data to support the continuation of these practices."

The incidence of typhoid fever in the United States has declined steadily for many years. At the present time, the Committee said, less than 500 cases are reported annually, and a continuing downward trend can be expected. Cases are sporadic and are primarily related to contact with carriers rather than to common source exposure.

Referring to vaccines for paratyphoid A and B, which are typhoid-like fevers, the Advisory Committee stated, "The effectiveness of paratyphoid A vaccine has never been established, and recent field trials have shown that available paratyphoid B vaccines were ineffective. In view of these data and recognizing that paratyphoid A and B antigens when combined with typhoid vaccine may increase the occurrence of vaccine reactions, use of paratyphoid A and B vaccines is *not* recommended."

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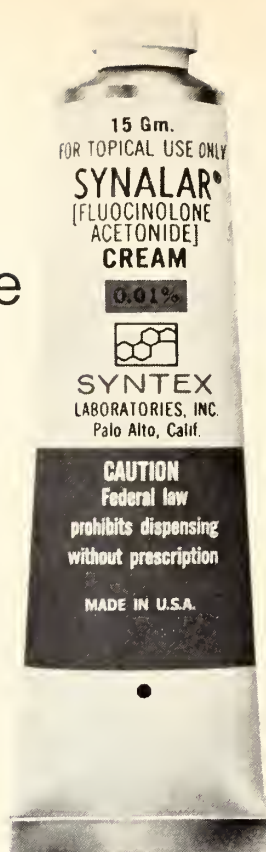
Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

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Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella) Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** 1. *General*—Synalar Cream 0.01% is virtually nonsensitizing and nonirritating. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to

have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for long periods of time. 2. *Occlusive dressing method*—With occlusion of the skin areas, systemic absorption of the corticosteroid may occur, and precautions should be taken. Occasional patients may show sensitivity to a particular dressing material or adhesive. Miliaria, folliculitis, and pyoderma have been seen infrequently with the use of this technique. Development of infection requires appropriate antibacterial therapy and continuation of the occlusive dressing method. Local atrophy has been reported with protracted occlusive dressing therapy. Worsening of relapses can be expected to occur in many psoriatic patients. The use of plastic films may persist for several weeks to several months in favorable cases. The patient whose psoriasis is in an active stage, with recent appearance of lesions, may not be a good candidate and may show early relapse. Plastic films may be flammable, and due care should be exercised in their use. Similarly, caution should be employed when such films are left near children to avoid the possibility of accidental suffocation. **Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may be unfavorably affected by Synalar under certain conditions. **References:** 1. Cahn, Levy, E. J.; J New Drugs 1:262 (Nov.-Dec.) 1961. 2. Meenan, F. Med Ass 52:75 (Mar.) 1963. 3. Robinson, H. M., Jr., Raskin, J., and W. J. R.; Southern Med J 56:797 (Jul.) 1963.

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GUIDELINES FOR SKILLED NURSING HOMES ISSUED

Guidelines to help skilled nursing homes determine if they are in compliance with the non-discriminatory provisions of the Civil Rights Act of 1964 have been released by the Public Health Service.

Nursing homes that wish to take part in the Medicare program as extended care facilities starting January 1, 1967 must meet the quality of care standards set by the Social Security Administration and the non-discrimination provisions of Title VI of the Civil Rights Act.

- Assignment of rooms without asking for patient preference regarding race and not using patient transfer as a device to evade compliance

- All patients to receive services by employees and medical staff without regard to race, color, or national origin

- Opportunities for medical staff to practice in the nursing home without discrimination.

- Recruitment and selection of candidate for training programs without regard to race, color, or national origin

- All facilities and services to be operated within the home without discrimination

- Written policies concerning non-discrimination to be adopted, practiced, and communicated to staff members and employees



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and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction. Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy. We will be pleased to provide further information upon request.

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DORSEY

fall 1966

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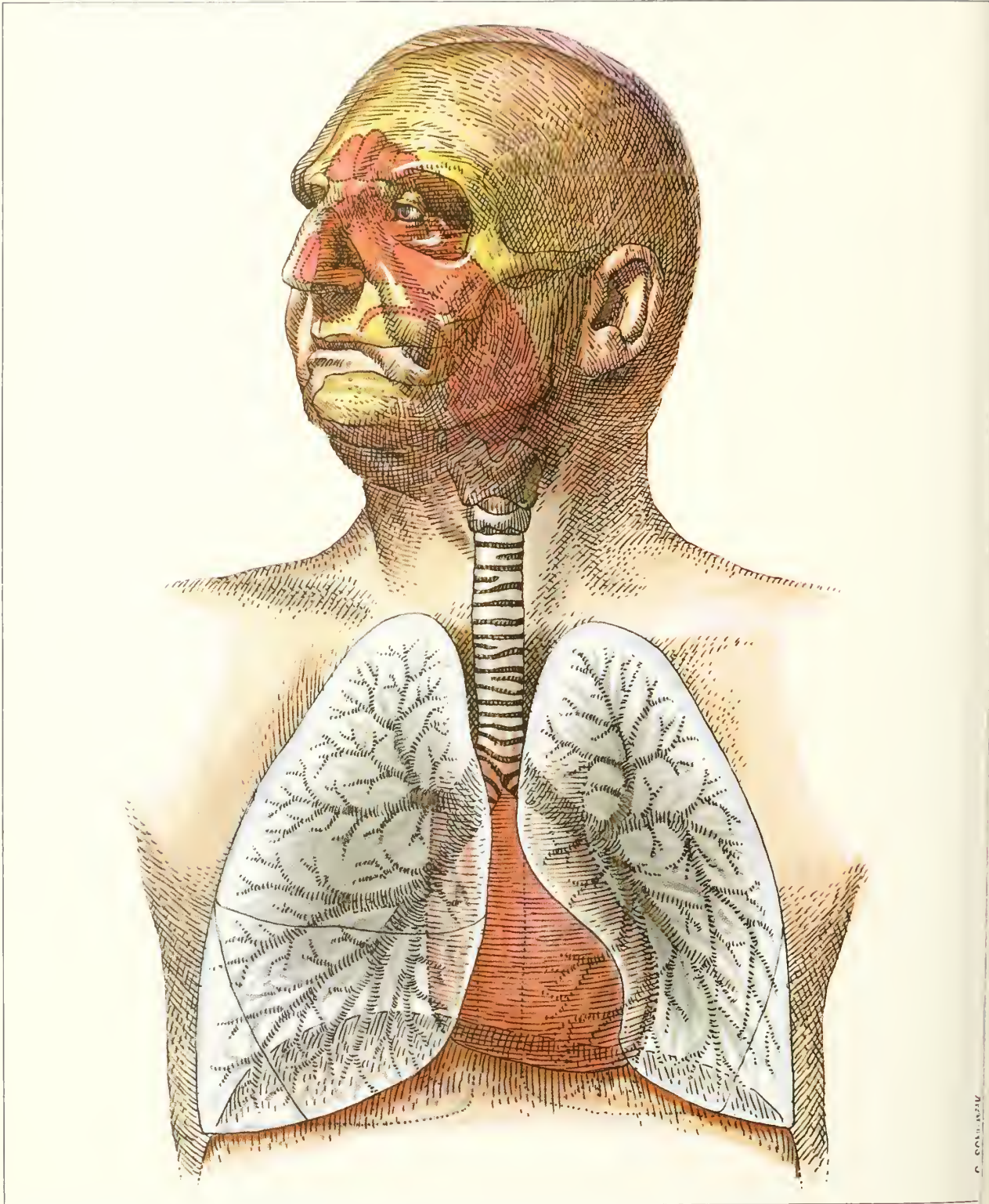
A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.



this issue: the common cold and the aging patient

the common cold and the aging patient

Louis J. Vorhaus, II, M.D., F.A.C.P.



Effects of aging on the anatomic and physiologic aspects of the respiratory apparatus.

The chest becomes more fixed, less mobile and less elastic as the bronchial walls and thoracic ligaments lose elasticity. The diaphragm and intercostal muscles atrophy and weaken. The lungs become smaller, flabbier and weigh less, decreasing vital and total lung capacity, increasing residual volume and the alveolar dead space.

Sir William Osler described pneumonia as the welcome friend of the aged patient, because the patient with pneumonia usually died quietly. But today, the well-informed physician is an even better friend of the aging patient, since it is better to live than to die, no matter how quietly.

One of the first avenues of approach in the control of the hazards of respiratory disease in the aging patient is prompt and proper attention to the common cold or upper respiratory infection. The common cold may be the first step in the relatively short path to lower respiratory infection, broncho-pneumonia and death. This train of events occurs frequently among older persons. Indeed, pneumonia is one of the most common causes of their admission to hospitals and ranks high on the list of geriatric killers. Colds are more debilitating in elderly people and the aged are more likely candidates for secondary infections such as sinusitis and bronchitis. These infections, in turn, are more prone to lead to broncho-pneumonia, because of lowered resistance and anatomic and physiologic changes in the lungs of the elderly.

What is different about the respiratory tree of an aged person and that of an otherwise healthy younger adult? Aging certainly takes its toll on all parts of the body, affecting both anatomic and physiologic aspects of the respiratory apparatus. These changes are in part due to the wear and tear that occurs over the years; the repeated bouts of respiratory infection, long exposure to atmospheric pollutants, to occupational inhalants, smoking, malnutrition, obesity, inactivity and the development of other diseases which may affect the lungs.

With the passage of years, the lungs change. They become scarred and emphysematous and lose their compliance. The whole chest becomes more fixed, less mobile and less elastic.

The anatomic changes that occur in aging render the lungs less efficient. Tests of pulmonary function in senescence show a deterioration characterized by a decrease in vital capacity and total lung capacity, an increase in residual volume and alveolar dead space. Maximum breathing capacity is reduced and uniformity of ventilation deteriorates. These problems are often aggravated by the obstructed breathing, fever and secondary infection associated with the common cold, placing an additional stress on the entire cardiopulmonary reserve.

In addition, the efficiency of a cough is below par in older persons even though they are in good health. This is partly due to the decreased respiratory excursions and distensibility of the chest wall, and partly from loss of elasticity of bronchial walls which tend to make them collapse in a cough.

The elderly patient's resistance to infection is often reduced. Nutritional deficiencies are more common in aged people. There is some evidence to indicate that their capacity to respond to stress is less efficient. Finally, there is often relatively meager symptomatic response to acute disease. The absence of obvious or dramatic clinical signs and symptoms of severe illness is particularly dangerous because, coming as it

(concluded on following page)

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Phenylpropanolamine hydrochloride	50 mg.
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Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

does in a person whose defenses are weakened both locally and systemically, pulmonary disease may progress rapidly to irreversible stages before medical attention is sought. Respiratory infection is especially hazardous because the aged patient responds badly to hypoxia. Not only is his response to oxygen lack impaired, but the work of breathing, due to decreased compliance of the lung and increased stiffness of the thorax, is markedly augmented.

Many patients late in life are in a precarious and delicate cardiopulmonary balance which is easily decompensated from relatively minor insults such as colds and upper respiratory infections.

For all of these reasons, geriatricians long have stressed the importance of preventing respiratory insults. Today we have better ways of treating respiratory infection, improved techniques for clearing the lungs and bronchial tubes of secretions and better understanding of ways of improving ventilation. We possess a broader spectrum of antimicrobial agents including newer ones to deal with previously resistant organisms. Even so, the death rate from pneumonia is high in older people, and it is preferable to avoid the disease than to treat it. To do so, attention must be paid to the general maintenance of good health and all that implies, as well as to the prevention, elimination and treatment of associated conditions that predispose to or cause pneumonia such as chronic upper or lower respiratory infection, respiratory allergy, chronic sinusitis and exposure to inspired irritants.

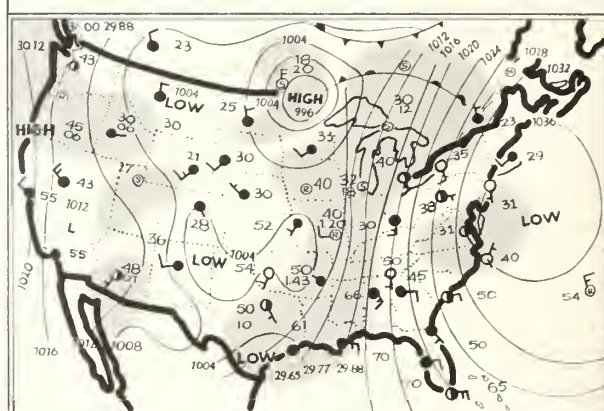
Colds and other minor respiratory infections, which favor the development of broncho-pneumonia, should be treated vigorously and promptly, particularly those patients whose aging process has been accompanied by the development of chronic pulmonary disease. Upper respiratory passages should be cleared with decongestants. Sinuses should be drained adequately. And, when indicated, appropriate antimicrobial therapy should be instituted before serious infection of the lower respiratory tree supervenes.

In decades past it was understandable that physicians welcomed pneumonia for the aged patients because it offered them a quiet and peaceful demise. Today we recognize that in many cases, peaceful as it may have been, such deaths were often avoidable. With the current knowledge and understanding of the problems that respiratory infections impose on aging people, vigilant medical attention can often

restore them to a vigorous, rewarding and productive life so that the many opportunities that exist today for people to enjoy their golden years are realized and not stolen by untimely death.

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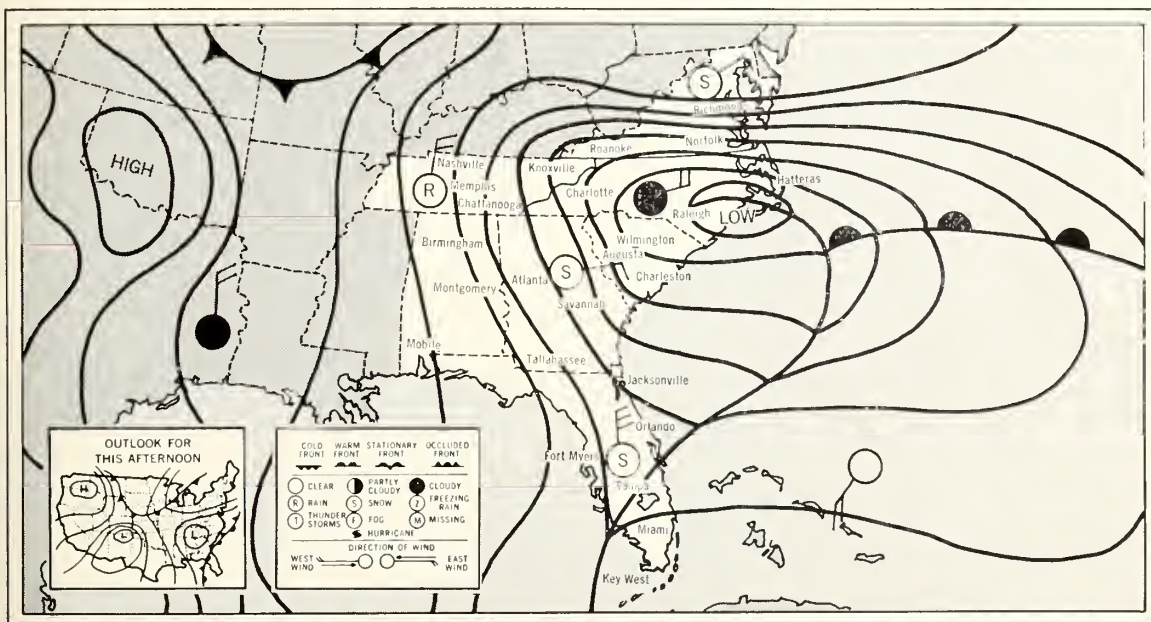
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SOCIO-ECONOMIC HEALTH CARE CONGRESS JAN. 22-23

The effective organization and delivery of health services will be explored at the 1st National Congress on the Socio-Economics of Health Care, Jan. 22-23, 1967 in Chicago.

The Congress, sponsored by the Council on Medical Service and the Division of Socio-Economic Activities of the American Medical Association, will be held at the Palmer House, and will bring together authorities from medicine, health care administration, social science, education, community planning, and other disciplines to report on new issues, developments and techniques in the organization, delivery and financing of health care services.

George W. Slagle, M. D., Battle Creek, Mich., chairman of the Council, said the meeting will serve as a national forum for

interchange of information and opinion among the many areas of society concerned with this subject.

Through a series of presentations and discussion session, conference participants will explore current health status of the population, impact of medical and social changes on patterns of health care, the changing role of the hospital and its medical staff in the community, new methods in training and utilization of health manpower, and financing of health services.

Additional information, including registration details, may be obtained from the Division of Socio-Economic Activities, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

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MOLECULAR REMODELING—

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.¹ Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,² the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.³

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.⁴ However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.⁵

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.⁶ The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.⁷ And, like its predecessor, acetazolamide precipitated metabolic acidosis. Its prolonged use could result in hypokalemic acidosis.⁷

The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

In spite of the fact that the sulfonamide

group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.⁸ Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.^{9,10}

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.¹¹ It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.¹¹ The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.¹¹ Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.⁷

Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.¹²

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with

doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."¹³

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

Contraindications: Severe renal impairment; previous hypersensitivity.

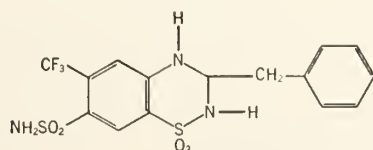
Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycaemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin \bar{c} K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

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SOUTHERN MEDICAL HONORS DR. J. GARBER GALBRAITH

J. Garber Galbraith, M. D., of Birmingham will be honored Nov. 13 in Washington, D. C., as he steps down as president of the Southern Medical Association.

Dr. Galbraith will be the guest of honor at the President's Reception at the Washington Hilton, and on the following day a luncheon will be given in his honor at the same hotel. The featured speaker at the luncheon will be Milford O. Rouse, M. D., Dallas, president-elect of the American Medical Association.

Dr. Galbraith is Neuro-Surgeon-in-Chief at University Hospital and is also chairman of the Department of Neuro-Surgery at the Medical College.

The programs honoring Dr. Galbraith are a part of the 60th annual meeting of the Southern Medical Association, Nov. 14-17.

The four-day meeting will include 22 special sections, scientific and technical exhibits, and a host of prominent speakers.

In addition a number of colleges and universities have scheduled alumni reunions during the meeting, including the Medical College of Alabama. Other reunions scheduled are the medical colleges of Duke, George Washington, Georgia, South Carolina, St. Louis, Tulane, Louisville, Maryland, Mississippi, North Carolina and Tennessee.

Other than the business sessions and technical programs, a variety of entertainment is scheduled including the annual dinner dance Nov. 16, a golf tournament at the Woodmont Country Club and other activities for the wives of physicians who attend the meeting.

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AWARDS ARE ANNOUNCED FOR FERTILITY SOCIETY

The American Fertility Society announces that the following awards will be made at its Annual Scientific Meeting at the Hotel Shoreham, Washington, D. C., April 14-16, 1967:

I. The Ayerst Lecture Award, consisting of a \$250. honorarium and expenses, to be awarded to the Committee's choice of an outstanding international scholar in the field of reproductive biology.

II. The Carl G. Hartman Grant-in-Aid Award, consisting of \$750., to be awarded to the Committee's choice of a promising young man in obstetrics and gynecology residency training, for the purpose of meeting expense in attending scientific meetings or visiting clinical and research centers.

III. The I. C. Rubin Award of \$500., together with a Certificate of Merit, to be awarded to the author of the paper selected by the Awards Committee to be the most significant contribution appearing in the journal, *Fertility and Sterility*, during the year 1966.

IV. The Ortho Medal and \$1000. will be awarded to the Awards Committee's selection of the individual who has made the outstanding contribution to the field of fertility and reproductive biology during the years, 1964, 1965 and 1966.

V. The Samuel L. Siegler Lecture Award, consisting of \$1000. and expenses, to an outstanding physician and/or scientist recognized in the field of fertility and sterility as judged by the Awards Committee.

VI. The Upjohn Lecture Award in Veterinary Science, consisting of a \$1000 prize for the best paper pertaining to reproductive biology submitted by an individual sponsored by a school of veterinary medicine.

Requests for information concerning these awards should be made to: J. George Moore, I. D., Chairman, Awards Committee, 622 West 168th Street, New York, New York 10032.

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LAS VEGAS—More than 5,000 American physicians will return to the classroom here in November at a four-day session designed to add to their medical knowledge and skills.

The American Medical Association's Clinical Convention, the largest educational enterprise of its kind, will open its 20th annual meeting Nov. 27.

More than 12,000 persons are expected to attend, including the 5,000 physicians.

The Convention's purpose is to bring the latest medical knowledge to the doctor. The meeting moves about the country, convening in a different city each year. Last year's Convention was in Philadelphia; next year's will be in Houston.

Discussion topics at Las Vegas will include "The Problem and Potential of LSD," the controversial drug, and "An Agonizing Reappraisal of Cancer Chemotherapy," an assess-

ment of the effectiveness of drugs in treating various kinds of cancer. Doctors will discuss these and other topics at breakfast roundtables, before the day's regular teaching sessions begin.

Scientific presentations will be given on 18 specialized topics, including juvenile diabetes, aerospace medicine, psychiatry, pediatrics, and diagnostic and therapeutic tools of the future.

Extensive scientific and industrial exhibits will be displayed in the newly expanded Las Vegas Convention Center.

Closed-circuit color television programs and more than 25 medical motion pictures will be presented.

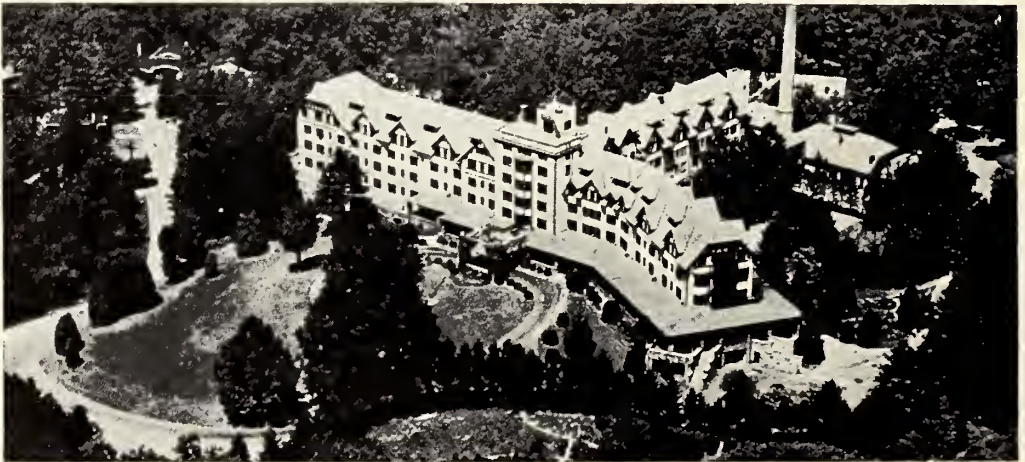
The AMA's policy-making House of Delegates also will meet in the Dunes Hotel and at Caesar's Palace.

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Adverse reactions: Drowsiness, ataxia and confusion may occur, especially in elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. Syncope occurs rarely. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis, jaundice and hepatic dysfunction) may develop occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy. Individual maintenance dosages should be determined.

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- Prophylactic Control of Angina Pectoris . . . 667*
*"Closed" Heart Surgery
in Infants and Children . . . 671*
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Medicine and Chiropractic . . . 713



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Volume 36 • December, 1966 • No. 6

Office of Publication

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Subscription Price \$5.00 Per Year
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Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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CONTENTS

President's Page	612
Editorial Comment	618
The Chiropractor Emerges From His Hole	618
Partnership with Mr. Humphrey	620
Abortion Contradiction	622
Killers Loose on Highways	623
Letter to the Editor	626
Vast Increase in Medical Education Is Goal	626
Agreement Reached With Blue Shield	628
Blue Cross-Blue Shield Agreement in Alabama Gives Physicians Louder Voice in Operation	637
Physicians, Corporation and Insured Public To Benefit from Blue Shield Proposal	653
International Medical Assembly to Meet	656
Cancer Center Opens	656
Hospital Based Reimbursement Plans Listed	657
Most Radiologists Submitting Separate Bills	658
Measles Remain Serious Health Menace	663
Scientific Section	667
Prophylactic Control of Angina Pectoris; Double-Blind Study of Prolonged Release Nitroglycerin, Jerre R. White, M. D., Tuscaloosa, Alabama	667
"Closed" Heart Surgery in Infants and Children, Church E. Murdock, Jr., M. D., FACS; Hollis J. Wiseman, M. D., FAAP; and Robert O. Harris, III, M. D., FAAP, Mobile, Alabama	671
California Study Provides New Smoking-Cancer Link	683
Medicine, Stamps, and the History of Man	687
World's First Camp for Diabetics	695
Medicine and Chiropractic, H. Thomas Ballantine, Jr., M. D.	713
The Month in Washington	731
Association Forum	733
Called Meeting of Counsellors and Delegates Attracts Biggest Crowd in MASA History	733
Statement of Position	738
Around the State	741
Dr. Frank Moody, Noted Gastrointestinal Surgeons, Joins Faculty of University Medical College	741
County Societies Meet	742
State Department of Public Health	750

When the stagnant sinus must be drained...



Transillumination of the sinuses — diffuse shadow on right side of face indicates unilateral maxillary sinusitis.

In the common cold, Neo-Synephrine is unsurpassed for reducing nasal turgescence. It stops the stuffy feeling at once. It opens sinus ostia to re-establish drainage and lessen the chance of sinusitis. With Neo-Synephrine, in the concentrations most commonly used, decongestion lasts long enough for extended breathing comfort, without endangering delicate respiratory tissue. Systemic side effects are virtually unknown. There is little rebound tendency.

Neo-Synephrine[®] HCl

Brand of phenylephrine hydrochloride

is available in a variety of forms,
for all ages:

- $\frac{1}{8}\%$ solution for infants
- $\frac{1}{4}\%$ solution for children and adults
- $\frac{1}{4}\%$ pediatric nasal spray for children
- $\frac{1}{2}\%$ solution for adults
- $\frac{1}{2}\%$ nasal spray for adults
- $\frac{1}{2}\%$ jelly for children and adults
- 1% solution for adults (resistant cases)

Also NTZ[®] Solution or Spray
Antihistamine-decongestant

President's Page

On Title XIX of the Social Security Amendments of 1965

Those of you who attended the special session of the College of Counsellors and House of Delegates of the Association in Montgomery on November 6, 1966, are familiar with our position pertaining to issues we consider vital to implementation in Alabama of Title XIX of Public Law 89-97.

The purpose of this particular amendment is to provide care for *ALL* State welfare recipients and *ALL MEDICALLY NEEDY* not on the welfare rolls. The latter group presumably includes those able to feed and clothe themselves, but unable to meet expenses incident to illness. These two categories will constitute a large segment of our population.

Quite obviously the *primary* purpose of this amendment is to provide *medical care*. Thus, it is *principally* a medical program, dependent upon the physicians of this state for effective implementation and execution. The determination of eligibility and disbursement of costs are *secondary*, although necessary operational facets.

The federal law provides that a single state agency be established or designated to supervise or administer the plan. Each state has the prerogative of deciding which state agency shall have this responsibility. However, the federal law dictates that the state agency administering Old Age Assistance shall determine eligibility for benefits under Title XIX.

In Alabama, the Department of Pensions and Security administers Old Age Assistance and shall determine eligibility under Title XIX. According to the federal law, participation of that agency need not extend beyond eligibility determination for a Title XIX beneficiary. Consequently, the Medical Asso-



Dr. J. O. Finney

ciation of the State of Alabama has expressed the conviction that the State Department of Health should be designated to administer and supervise the Title XIX program in Alabama.

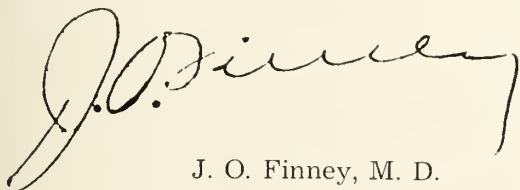
Principle #5 in our adopted Statement of Position contains provisions of striking importance to the practicing physician. The provisions are, that:

- A. Patients shall have free choice of physician and institution;
- B. There shall be no interference in the practice of medicine by any official of the state or federal government;
- C. There shall be no limitation on drugs, appliances or services prescribed by a physician, unless dictated by financial consideration;

- D. There shall be no requirement for prior authorization to extend medical services, or to admit a patient to a hospital or other medical institution.

Governor Wallace earlier designated the Department of Pensions and Security to administer Title XIX in Alabama. We do not believe such an arrangement to be in the best interest of the program, or those it is intended to serve. Our Association, through official action, proposes to call on the Governor and State Legislature to place administration and supervision of the Title XIX program in the hands of the State Department of Health.

The role of each member of our Association should be clear. You! You! You! and I must see to it that our respective members of the Legislature concur with us in our honest conviction.



J. O. Finney, M. D.
President

Canned Goods Must Be Rotated

Citizens who have neglected to rotate their stocks of canned goods stored in fallout shelters can learn a lesson from a recent study on the effects of storing foods in "tin cans" for prolonged periods of time. In a recent issue of the *American Journal of Clinical Nutrition*, researchers who fed "old" canned foods to volunteers found that amounts of iron and tin in the food were markedly increased. Fortunately, all of the tin and a major portion of the iron were excreted. However, the investigators pointed out a possible relationship between the increased absorption of iron and development of vitamin B₆ deficiency. This is characterized by nervousness, insomnia, abdominal pain, weakness and difficulty in walking—*GP*, April, p. 77.

Contaminated Shellfish

Hepatitis transmitted by shellfish may be preventable, according to studies conducted by Public Health Service investigators. In their experiments, oysters and clams were found to become highly contaminated in water that was polluted with a low concentration of poliovirus and the bacterial infective agent, *Escherichia coli*. Conversely, on exposure to water that was kept free of organisms by treatment with ultraviolet light, the shellfish eliminated the organisms within 24 hours. The researchers hope that the irradiation technique can be adapted to purify shellfish before marketing, such as milk is made safer by pasteurization.—*Med. World News*, April 8, p. 7.

Thumbnail Habits

If transverse ridging of the thumbnails occurs without a history of injury and without other nails being involved, the patient probably has a nervous habit, reports Dr. W. L. Macaulay of Fargo, N. D. He has found that "washboard thumbnails" are due to a patient's compulsion to pick at or scratch the thumbnails, sometimes digging at the cuticle as well, with another finger of the same hand. He describes three patients, each of whom readily acknowledged the habit of scratching the thumbs with another finger. When this habit was controlled, the thumbnails grew out normally.—*Arch. Derm.*, April, pp. 421-423.

* * *

Members of an association of deaf persons, and their wives, have willed their own deaf inner ears to medical research. Each donor will carry an "ear-donor" identification card to insure prompt fulfillment of their bequests and delivery to a temporal bone bank. A network of 41 temporal bone banks exists throughout the U. S. The work of these research laboratories is coordinated by four regional temporal bone bank centers located at Johns Hopkins Hospital, the University of Chicago, Baylor University, and the University of California San Francisco Medical Center. The centers maintain complete files on donors.

**How long will
it take her
to recover from
her hip fracture
if she just
doesn't care?**



Does she really care?
Is she alert, encouraged,
positive and optimistic
without getting completely
tired all soon?

Or has she given in to
the demoralizing impact
of confinement, disability
and dependency?

When functional fatigue
complicates convalescence,
Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride —an effective cerebral stimulant whose gentle ana-
leptic action helps counteract the apathy and inertia
that can often delay convalescence—together with an
excellent vitamin and mineral formula, in a satisfy-
ing 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-
being better than your own personal warmth, under-
standing and encouragement together with Alertonic
to help insure prompt response.

*Adequate dosage is important: Prescribe Alertonic—
one tablespoonful t.i.d., 30 minutes before
meals...tastes best chilled.*

*And for your patient's sake, prescribe Alertonic
in the convenient, economical one-pint bottle.*

Alertonic[®]

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydro-
chloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10
mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride
(vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,[†] 100 mg.;
inositol,[†] 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2%
MDR for calcium and for phosphorus) and 1 mg. each of the following:
cobalt (as chloride), manganese (as sulfate), magnesium (as acetate),
zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a
depressing life experience or stressful time of life; advancing years;
convalescence; limited activity or confinement. 2. Poor appetite and
vitamin-mineral deficiency as they occur in: patients having faulty eat-
ing habits; geriatric patients who are losing interest in food; patients
convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2
teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken
three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action,
Alertonic is contraindicated in hyperactive, agitated or severely anxious
patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who
are known to be unduly sensitive to the effects of stimulant drugs should
be observed carefully in the initial stages of treatment.

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Cincinnati, Ohio 45215



The Chiropractor Emerges From His Hole

One day last month postmen of Montgomery began delivering a 12-page tabloid entitled "Iconoclast," allegedly published by the Alabama State Chiropractic Federation, Inc. The publication hails itself as a "Periodical of Protest." Its front page was graced by a hooded death-head holding in its skeleton fingers a hypodermic syringe. Beneath the illustration was the caption, "The Angel of Death Loves Drugs."

Our dictionary defines Iconoclast as (1) an image breaker; (2) one hostile to the practice of image worship; (3) one who attacks superstition or shams.

Copies of the tabloid, a dozen pages of diatribe against the medical profession, were distributed to the College of Counsellors and House of Delegates meeting in Called Session in Montgomery on November 6. It is hoped that by this time the Counsellors and Delegates will have acquainted their fellow physicians back at home with the type of war chiropractors are prepared to wage to destroy the image of medicine and the reputations of its practitioners.

It is now conceded that the physicians of Alabama made a serious mistake in 1960 when they relaxed their campaign to prevent licensure for this unscientific cult. However, in fairness it must be stated that, at that time, the law seemed to offer sufficient protection to the people by requiring that any applicant for license must pass a recognized basic science examination.

In the years since 1960, no chiropractor has been able to pass the basic science test—a

test usually taken by medical students at the end of their second year.

These failures apparently have rankled the chiropractors. They have made many attempts to circumvent the law by enacting legislation to permit their own National Board of Chiropractic Examiners to administer a basic science test. Medicine has fought this departure from the statute on the ground that the examiners are no more knowledgeable in the basic sciences than the examinees.

At the conclusion of the most recent hearing on this matter before the Health Committee of the House of Representatives of the Alabama Legislature, the two chiropractor-members of the Legislature made it clear that they would continue to fight for licensure of chiropractic applicants, whatever their lack of qualification.

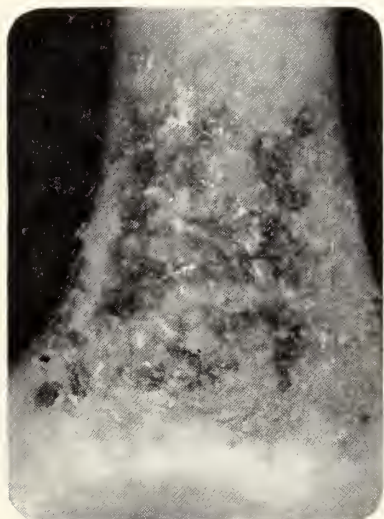
When spokesman for the Medical Association of the State of Alabama exposed the incompetence of the National Board of Chiropractic Examiners to administer a basic science examination there was talk of a law suit.

Perhaps this is the answer.

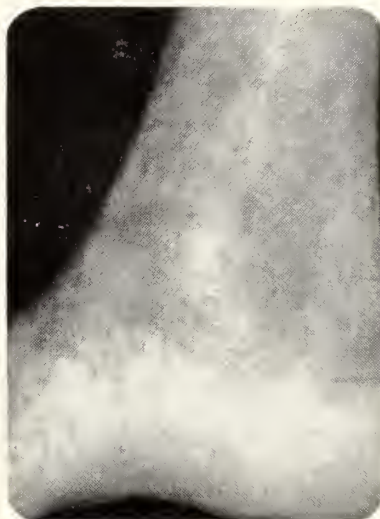
Has not the time come to unmask chiropractic for what it is? Does not the medical profession owe a solemn obligation to the people of Alabama to protect them from quackery and charlatans who practice mysticism instead of medicine, to whom subluxation of the spine is the root source of all diseases, curable by a twist here and a jerk there.

The chiropractors have hurled down the gauntlet. What's holding up the war?

Eczema of many years... controlled in two weeks



Before treatment



*After treatment —
with ARISTOCORT Topical
Ointment 0.1% for two weeks*

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side

effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive non-permeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyoderma will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

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Aristocort®

Topical Ointment 0.1% and Cream 0.1%, 0.5%
Triamcinolone Acetonide

Also available in foam form.



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PARTNERSHIP WITH MR. HUMPHREY

Very few Alabama physicians would be willing to accede to the request made in an article written by Vice President Hubert H. Humphrey in the September issue of Medical World News entitled, "Doctors, Let us be Partners." In truth, there is hardly a man alive with whom the members of this Association would be more reluctant to join in partnership.

The Vice President claims some distant kinship to the medical fraternity by virtue of the fact that he once worked in a drug store in Michigan. We have no way of knowing the ingredients of the capsules which druggist Humphrey parceled out to his customers, but we do know that the socialistic medicine that he peddled to the American people when he entered politics ranged somewhere between highly intoxicating and lethal.

If Medical World News was intending to attract attention to itself by publication of Mr. Humphrey's article, it probably succeeded beyond its fondest expectations. But if it was attempting to influence the physicians of this nation to follow the Humphrey line of government-by-subsidy to all and sundry with reckless disregard for cost or consequences, then it can count its effort a dismal failure.

Physicians need only to examine other professional fields—notably industry and education—to find proof that government eventually gains control of all that it subsidizes.

Mr. Humphrey is the supreme architect of ultra liberalism in this country, a role he assumed two decades ago. It is significant that until he endeavored to establish a line of communication with the medical profession, his every public utterance has been tinged with wild-eyed socialism.

The Vice President pleads for elimination of "poverty, ignorance, illiteracy, and disease." What man with an ounce of compas-

sion does not share this desire?

But this goal will be attained, not through government destruction of initiative by making fully half of the population of this country wards of the Government, but through the pride and determination of free men and women to shape their own destinies.

"• Let us be partners" Mr. Humphrey implores even as he plots and plans with other leaders of his party to impose unworkable restrictions on medical practices. He calls upon physicians to "voluntarily" serve their communities, to provide "total" health care to the indigent and not-so-indigent, under the government rules and guidelines handed down by bureaucrats in Washington.

"• I invite American medicine to come forth with its constructive suggestions," he writes. Let the Executive and Legislative branches hear your expert views. Let us improve whatever needs improving. Let us be genuine working partners. Frank and friendly dialogue can illuminate our problems and light the path ahead. 'Come, let us reason together,' President Johnson has often said, quoting the Biblical admonition. Medicine is reason in action. Medicine is science and art, dedicated to the service of man. Medicine deserves the respect of every layman.

"• To underscore the need for more teamwork, let us consider the new programs the federal government has enacted in recent years to help bring medical care to Americans in need:

"• A gap had developed between the findings of research and day-to-day application. Only in a handful of great metropolitan centers were discoveries being put to work. To help meet this problem, Congress enacted legislation setting up a network of regional heart disease, cancer, and stroke centers.

"• Alarming shortages in health personnel had developed, and even more serious short-

(Continued on Page 622)



Breast-feeding and the “modern mother”

Despite a mild resurgence of interest in the importance of breast-feeding a few years ago, many women today do not choose to nurse their young. This is for a variety of reasons—social, economic, cultural and sometimes medical. In such cases the physician's task is to find the most suitable means of preventing lactation and easing the pain of breast engorgement.

The means of therapy

The value of hormone therapy for this indication is of course well established. Both androgen and estrogen are known to inhibit the production and secretion of the lactogenic hormone by the anterior pituitary. As estrogen levels decline sharply at parturition, lactogenesis is established. When androgen and estrogen are administered to the patient before the release of the lactogenic hormone lactation and breast engorgement are usually prevented.

The time of therapy

The time of administration of this combined medication is crucial; it must be given early enough to suppress the pituitary prolactin and last long enough to permit physiologic readjustment during the puerperium. Excellent results are most often seen when therapy is administered before the onset of the second stage of labor.

However, factors other than effectiveness must also be considered. The agent selected should not interfere in any way with parturition, subsequent uterine involution and the restoration of normal ovarian cyclic function. Furthermore, it should not cause rebound breast engorgement or other manifestations of hormonal imbalance.

A balanced formulation

Providing single-dose therapy for the prevention of lactation and breast engorgement, Deladumone OB is a potent androgen-estrogen combination with a prolonged action. The optimal balance of androgenic and estrogenic hormones achieved in this preparation minimizes the disadvantages inherent in single hormone therapy, such as rebound breast engorgement. Involution of the uterus and resumption of menstrual cycles are not affected.

As reported in a recent published study (Roser, D. M.: *Obstet. & Gynec.* 27:73, 1966), Deladumone OB provided good suppression of breast engorgement in 95.3% and suppression of lactation in 81.1% of 86 obstetrical patients. These results are in general agreement with those of many earlier investigations; in several studies this injectable androgen-estrogen combination proved to be superior to oral medication.

Dosage:

As a single injection of 2 cc. before the onset of the second stage of labor.

Contraindications:

Established or suspected mammary cancer or genital malignancy.

Precautions and Side Effects:

Certain patients may be unusually responsive to either estrogenic or androgenic therapy. In such individuals virilization, uterine bleeding or mastodynia may occur.


Supply:

Deladumone OB, providing 180 mg. testosterone enanthate and 8 mg. estradiol valerate per cc., is available in 2 cc. Unimatic® disposable syringes and in 2 cc. vials. Both preparations are dissolved in sesame oil, with 2% benzyl alcohol as a preservative. *Before use, consult product literature for full prescribing information.*

Deladumone® OB

Squibb Testosterone Enanthate (180 mg./cc.) and Estradiol Valerate (8 mg./cc.)

Single-dose injection for lactation inhibition

SQUIBB  "The Priceless Ingredient" of every product
is the honor and integrity of its maker.

PARTNERSHIP WITH MR. HUMPHREY

(Continued from Page 620)

ages loomed. Congress enacted the Health Professions Education Assistance Act of 1963 to construct and expand teaching facilities to operate student loan funds. Last year, amendments were added to provide basic and special improvement grants for school training as well as a new program of scholarship. In 1964, Congress passed the Nurses Training Act to assist students of nursing and schools of nursing.

“• Millions of elderly persons with only fragmentary protection from private insurance could not afford rising hospital and medical costs. Congress last extended the Social Security system to cover hospital costs by payroll contributions, in addition to making it possible to cover most medical costs by optional enrollment.

“• Mental disease, the most widespread illness of modern society, filled half our hospital beds and exacted a staggering toll in disability and misery. Congress enacted the Community Mental Health Center Law and then broadened it to provide staffing.

“• Mental retardation blighted 5.4 million lives directly and millions more indirectly. New programs were authorized by Congress to deal with the medical, educational, and vocational needs of the retarded.

“• One fifth of American families eked out a drab existence in urban and rural slums. Their children were virtually condemned to disease, ignorance and destitution. The War on Poverty was launched with a variety of bold experiments, like Project Head Start, with crucial health components.

“• Our environment has become increasingly contaminated, our air and water polluted. Congress has taken action on these fronts. It also has acted to reduce the staggering toll taken by highway accidents.”

Beautiful words indeed, Mr. Humphrey, beautifully phrased and designed expertly to mislead the unwary into thinking that the Great Society would be Medicine's friend.

But your actions already have spoken much louder than any words you can pen.

When Medicine sought to counsel and advise with the Administration to assure that only the truly indigent would receive government-paid health services you deceived us and produced legislation designed more to win votes than to help the poor.

Your bureaucracies secretively injected into Public Law 89-97 extraneous matters such as Title XIX about which the public was deliberately kept uninformed.

No, Mr. Humphrey, your partners are the Americans for Democratic Action and the big Labor leaders. To them and to them only do you owe your allegiance. Medicine is not ready to clasp to its breast anyone who would sell this country down the river toward Socialism, however sugar-coated his pill may be.

Abortion Contradictions

In San Francisco nine obstetricians have been ordered to appear before the State Medical Board to face charges of unprofessional conduct for having performed therapeutic abortions on women who suffered from rubella during pregnancy.

In New York City a hospital is being sued for refusing to perform an abortion on a woman with documented first-trimester rubella which resulted in the birth of a deformed infant.

Contradictions such as these underscore the need for a long, hard look at abortion laws in this nation. It is a delicate problem, and this delicacy may explain why in past years it has been swept under the rug rather than confronted and resolved.

There is presently a wide variation in state laws concerning abortion. Surprisingly, Alabama has one of the most liberal laws on this subject. While most states consider abortions

a serious crime and define it as a felony, it is relegated to a misdemeanor in Alabama carrying with it a maximum punishment of a \$1,000 fine and 12 months at hard labor in the county jail.

Alabama's abortion law also differs from most other states in another significant respect. An abortion may be performed in this state if it is "necessary to preserve the life or health" of the woman, whereas in most states the operation is legal only if it is necessary to save the life of the patient.

More and more the attention of the public is being focused on the contradictions in the abortion laws and the contradictions in their interpretations. Ticklish though the problem is, it should be faced, and soon.

Killers Loose On Highways

It will come as no surprise to the medical profession since they daily see the real evidence rather than the impersonal statistics, but what has become a problem of national concern is the frequency in which young people—those under 25—are killing themselves and other people in automobile accidents.

The Journal of American Insurance, official voice of an industry which has good reason to be concerned, has in its current issue a grim report of the driving record of young people. The report is discouraging because it offers conclusive proof that the situation is steadily worsening.

In 1960 only 19.4 per cent of all licensed drivers were under 25, yet they were the drivers in 28.7 per cent of fatal accidents and 28.8 per cent of all accidents.

Today the under-25 drivers constitute 20.2 per cent of all licensed drivers yet they are involved in 32.7 per cent of fatal accidents and 33.2 per cent of all accidents.

And what makes these figures even more alarming is the fact that in the years im-

mediately ahead the number of under-25 drivers will increase enormously—from the 19,800,000 now licensed to upwards of 30,000,000 by 1980.

Traffic experts are in total agreement that driver education in high schools can make a significant contribution toward improving driving habits of young people. They also agree that strict enforcement of traffic laws, with more rigid standards set for new drivers, will help.

But considered far more important than either of these is parental control. Listed first for the parents is setting a good example. Police files are full of accident reports which the young driver said that all he did was do what he had seen his father do a million times.

Another recommendation is that young people be instructed to drive under all weather and traffic conditions before being allowed to drive alone. Most youngsters get their drivers training from Dad on some isolated road (or in a shopping center parking lot), usually under sunny skies and where there is little or no traffic. Little wonder they are involved in accidents when they find themselves in bumper-to-bumper traffic in a rain storm.

The members of the medical profession, concerned about the total health of their patients, have good cause to be concerned about this national tragedy. They, too, have a role in slowing down, if not halting, this slaughter of our young people on the highways.

Ways of identifying the estimated two million unknown diabetics in the U. S. are explored in a new 39-minute film for professional audiences. Topics ranging from mass screening techniques to the alleviation of vascular complications of diabetes are covered. Requests for the film should be addressed to Diabetes Detection Program, Room 914, 342 Madison Ave., New York, N. Y. 10017.

**When
thiazide
or
reserpine
alone
won't
keep**

**BLOOD
PRESSURE
DOWN**

Establish and maintain early, more decisive control of blood pressure

DIUTENSEN-R®

Cryptenamine 1.0 mg.* Methyclothiazide 2.5 mg. Reserpine 0.1 mg.

When blood pressure won't stay down despite initial therapy — when complaints of headache, fatigue or dizziness are often voiced — it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine *plus* cryptenamine — a rational, comprehensive therapy to help establish and maintain early, more decisive control of blood pressure.

The cryptenamine in DIUTENSEN-R helps improve normal vasodilating reflexes while the thiazide and reserpine components maintain vasorelaxant, sedative, and saluretic benefits. Cryptenamine lowers pressoreceptor reflex thresholds (which may be abnormally high in hypertension) — “resets” pressoreceptors to function at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

“...quite apart from the problem of vascular damage, there arises a possibility of virtual ‘cure’ or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive.”

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice* 1966-67, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals.

However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars.

Side effects and precautions: The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout symptoms and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon. DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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LETTER TO THE EDITOR

Dear Editor:

I am writing to comment on the editorial on page 474 of the November 1966 copy of The Journal. I do not know who composed this editorial, but as Managing Editor of The Journal, you may be interested in the reaction of one of your readers.

If this editorial is offered for the purpose of letting the doctors in Alabama hear what they would like to hear and read what they would like to read, then no one could take issue with it. If, however, the editorial purpose is to help inform and educate the doctors of Alabama to better meet "MEDICINE'S GREATEST CHALLENGE," then the editorial falls far short.

I feel that this editorial smacks strongly of the negativism that abounds in medical circles and that is likely to make our current transitions in patterns of medical practice much more difficult to accept. In my opinion, organized medicine does not need to "fight to the last ditch." What it needs to do instead is to recognize the obvious changes that are taking place in our society and to realize that whether we like it or not the era of social medicine is upon us. We as individual doctors and as an organization of doctors must learn to accommodate ourselves to a whole new series of concepts regarding the role of medicine in society at large. We must evaluate these concepts professionally and as far as possible without political bias. We must then offer purely professional opinions as to the wisdom of various proposed solutions to medical problems. These opinions must be based on our expert knowledge of medicine and medical practice and not on our meager knowledge of politics, sociology or economics. Otherwise I fear that Medicine's voice will continue to be unheeded and that subjugation of medical care to bureaucratic control will indeed become a reality.

I would personally like to see the editorials in the Journal discuss some of these pressing issues in more details. For example, what

are the features of Title 19 that are specifically objectionable? In what way could Alabama's implementation of Title 19 affect deleteriously the practice of medicine in Alabama? What recommendations can be made to the legislature to see that the Alabama plan for implementation is as acceptable as possible? What alternatives can be offered for developing adequate health care programs for "the blind, the cripple, the unwed, the dependent, the poor, and some other categories?" Where in our present coverage of health needs in Alabama do gaps exist that could be plugged with governmental assistance? What are the features of our present customs of medical practice that are essential to good health care and what are the features that are merely traditional and perhaps expendable? These and related questions provide a wealth of material for positive editorial coverage.

I personally do not believe that giving our state and federal governments the benefit of the medical profession's special knowledge and experience can be classified as "knuckling under." I feel instead that this is the only chance that we have of preserving even a vestige of professional independence. Simple resistance to change won't help because change is coming anyway. "MEDICINE'S GREATEST CHALLENGE" is to find ways of guiding the coming changes in directions that will lead to better medical care for the entire population.

Magraw's recently released book *Ferment in Medicine* (published by Saunders) is an excellent exposition of our current problems. You are probably familiar with this book and I would recommend it for study by anyone who is attempting to cope with our changing status or to comment on it.

I am offering the above comments in a spirit of sincere interest in the effect that your editorials may have on medical thinking and attitudes in this state.

Sincerely yours,

SAMUEL H. JONES, JR., M. D.

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AGREEMENT REACHED WITH BLUE SHIELD

(Editor's note: The following report of the State Board of Censors Ad Hoc Committee appointed to negotiate with Blue Cross-Blue Shield of Alabama, Inc. for a new agreement giving members of the Medical Association of the State of Alabama a broader voice in contractual matters was adopted at the 1966 Annual Session held in Mobile. As a result of this action and subsequent negotiations a new agreement has been accomplished which was unanimously approved at the Called Meeting of the College of Counsellors and House of Delegates held in Montgomery November 6, 1966. The full report of this action appears on this and the following pages.)

The Board commends its committee and thanks it for its diligent efforts. The Board does not, however, concur in this report of the Ad Hoc Committee in its entirety. The following, therefore, is the recommendation of the State Board of Censors:

The operation of Blue Cross-Blue Shield plan in Alabama has not been in the best interest of the people of the state of Alabama. Section 7 of Article 1 of the Bylaws of the corporation provides "that on all matters pertaining solely to the practice of medicine under the Blue Shield Plan in the State of Alabama, the six (6) medical members of the Board of Trustees shall possess and may exercise exclusive voting rights, privileges and powers."

This bylaw has been misconstrued so as to deprive the medical members of the Board of Directors of any realistic control over the terms, conditions, premiums and benefits payable under policies bearing the "Blue Shield" designation. In effect, the bylaw has been construed to give medical representatives final authority only with respect to standards of professional care and ethics, areas in which the corporation would have no authority in any event.

Since 1954, there has been a mingling of premiums received under Blue Cross policies and Blue Shield policies, and on occasions premiums for Blue Shield policies are being used to defray Blue Cross deficits. The purchasers of Blue Shield contracts have been deprived of medical/surgical benefits to which they were entitled.

The State Board of Censors therefore recommends:

1. That the Medical Association of the

State of Alabama not designate any further members to the Blue Cross-Blue Shield Board unless and until to do so is in the best interest of its subscribers and their physician.

2. That the Association reaffirm its position that no insurance company presently operating in the State of Alabama and providing medical/surgical benefits is or has been, "sponsored" by the Medical Association of the State of Alabama.

3. That the State Board of Censors continue negotiations with Blue Cross-Blue Shield of Alabama representatives until November 1, 1966, in an effort to assure that the physician members of Blue Cross-Blue Shield of Alabama have, and exercise, the authority originally intended that they have.

This proper authority for the physician members chosen by the Medical Association of the State of Alabama, to Blue Cross-Blue Shield Board membership is as follows:

- (1) The six medical members of the Board of Trustees and of the Board of Directors of the Corporation, voting as a group, or in conjunction with three of the six members of such boards representing the general public, shall have sole and final authority with respect to the terms and conditions of and the premiums and benefits payable under any insurance contract now issued or to be issued in the future by the Corporation and providing, in whole or in part, medical and/or surgical coverage, without regard to whether such contract shall be termed an "indemnity," "service," "paid-in-full," or "prepaid" contract, and without regard to whether such contract shall be termed a "Blue Shield" con-

(Continued on Page 630)



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AGREEMENT REACHED WITH BS

(Continued from Page 628)

tract or rider.

(2) The six medical members of the Board of Trustees and of the Board of Directors of the corporation, voting as a group, or in conjunction with three of the six members of such boards representing the general public, shall have sole and final authority with respect to the terms, conditions and administration of any plan, agreement or contract between the corporation and the federal government under which the corporation shall serve as intermediary or carrier, or as agent for the government, in the implementation of Part B of Title I of the Public Law 89-97 (Medicare Act) or the implementation of any part of that law, including, but without limitation, Title XIX thereof, pertaining to the payment of fees for medical and/or surgical services.

(3) The corporation shall keep separate accounts and render to the six medical members of the Blue Shield Board and the public, separate annual accountings, certified by independent public accountants, with respect to the receipt of premiums and the disbursement of allowed claims under (a) its hospital service contracts (generally termed "Blue Cross" contracts) and (b) its medical and/or surgical contracts (generally termed "Blue Shield" contracts or riders). No part of the funds received by the corporation as premiums under such "Blue Shield" contracts or riders shall be paid out for other than medical and/or surgical claims arising under such contracts or riders, except that such funds may be used to defray the general administrative and overhead costs and expenses of the corporation which are allocable, under generally accepted cost accounting principles, to the sale and servicing of such "Blue Shield" contracts or riders.

If by November 1, 1966 these recommendations have been effectively implemented, the Medical Association of the State of Alabama

will continue its relationship with Blue Cross-Blue Shield of Alabama.

The Board of Censors strongly recommends adoption of this report.

After discussion, a motion to adopt the report of the State Board of Censors was voted, and the motion passed favorably.

The report was adopted.

After adjournment, the Board of Censors, acting in its capacity, unanimously approved an amendment to the "Report of the State Board of Censors Special Committee Concerning—Blue Cross-Blue Shield of Alabama" as follows: Paragraph 10, section (1)—4th line, insert after "the general public" "**and Alabama Hospital Association . . .**"

A REPORT OF A MEETING ATTENDED BY MEMBERS OF THE AD HOC COMMITTEES OF BOTH THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA AND THE BOARD OF DIRECTORS OF BLUE CROSS-BLUE SHIELD OF ALABAMA AS WELL AS MEMBERS OF THE STAFF OF THE CORPORATION

On the evening of September 22, 1966, the following people attended the meeting referred to above: Dr. Paul W. Burleson; Dr. John M. Chenault; Dr. E. B. Glenn; Dr. Hugh E. Gray; Mr. Searcy H. Johnson, Jr.; Mr. M. E. Moor, Jr.; Mr. C. L. Sibley; Mr. H. F. Singleton; Mr. William E. Miller, Jr.

The meeting was convened in the offices of the Corporation at 5:30 p.m. on September 22, 1966. The purpose of said meeting was to work out an equitable arrangement whereby the recommendations of the Medical Association contained in the resolution passed at its Annual Meeting in April, 1966 could be implemented satisfactorily within the framework of the existing Corporation. This meeting was held in an atmosphere of cordiality and discussions commenced in a climate of faith and trust of all parties concerned. Certainly the attitude of all conferees contained an enthusiasm and dedication to the job at

(Continued on Page 633)



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Chiller, I. W., and Lowell, F. C.: New England Med. 261:478, 1959.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on

rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

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Hyoscyamine sulfate 0.031 mg.

Codeine phosphate 1/4 gr. (No. 2),

1/2 gr. (No. 3), 1 gr. (No. 4)

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Side Effects: Side effects are uncommon — nausea, constipation, and drowsiness have been reported.

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AGREEMENT REACHED WITH BS

(Continued from Page 630)

hand and a sincerity of purpose in arriving at an equitable solution to these problems.

After lengthy discussions the following agreement was reached with unanimous support from all persons attending.

1. There will be established within the Board of Directors of the Corporation, two Executive Committees; one dealing with Blue Shield matters and one dealing with Blue Cross matters. The Blue Shield Committee will be composed of the six physician members of the Board of Directors along with three public members of the Board of Directors. Likewise, the Blue Cross Committee will be composed of the six hospital members of the Board of Directors along with the three remaining public members of said Board. These two Committees shall be respectively designated as, "Blue Shield Executive Committee" of the Board of Directors and "Blue Cross Executive Committee" of the Board of Directors. The Blue Shield Executive Committee shall have sole authority and responsibility in all matters dealing with Blue Shield activities of the Corporation during the interval of time between full Board of Directors meetings, and likewise the Blue Cross Executive Committee shall have corresponding authority and responsibility in dealing with Blue Cross activities of the Corporation during the interval of time between full Board of Directors meetings. These Committees shall meet separately on a monthly basis or at such other intervals as they may determine individually. It shall be their responsibility to conduct the affairs of the Corporation in their specific sphere of authority and responsibility during such intervals. The full Board of Directors shall meet no less often than quarterly for the purpose of receiving, reviewing and passing upon the reports of the activities of the two Executive Committees and also to conduct those affairs of the Corporation that are not assignable to the separate actions of the two Executive Committees.

2. The Corporation shall keep separate accounts and render to the two Executive Committees and to the public separate annual accounting subject to examination and verification by independent public accountants, with respect to the receipt of premiums and the disbursement of allowed claims under (a) its hospital service contract (generally termed "Blue Cross" contracts) and (b) its medical and/or surgical contracts (generally termed "Blue Shield" contracts or riders).

The Corporation shall establish the principle and adhere strictly thereto that premium rates for hospital care and those for physician care shall each be self-supporting. The Corporation's recently installed computer accounting system will disclose any inadequacy of rates from month to month so that no large deficit will be built up in either branch of the Corporation's business before discovery. As soon as the accounting records disclose that there is a failure of either type of business to be self-sustaining, the adjustment of rates to remedy this shall be promptly sought and put into effect.

If co-mingling of funds becomes necessary because of a loss position of one activity in relation to the other, such credit will be given back to the activity not in a loss position as soon as the rate adjustments are applied and a sufficient surplus is created to permit such crediting.

That it be recognized that because these programs are the responsibility of a single Corporation, its total assets are as a matter of law and of good faith committed to all of its liabilities. It would be impossible for one branch of the Corporation to be insolvent or bankrupt while the other carried on business as usual.

3. In respect to the terms, conditions, and administration of any plan, agreement or contract between the Corporation and the Federal Government under which the Corporation shall serve as intermediary or carrier or as agent for the Government under

(Continued on Page 634)

AGREEMENT REACHED WITH BS

(Continued from Page 633)

any provision of the Medicare Act or other federal medical programs pertaining to payment of fees under Medical and Surgical services, the same authority and responsibility as granted under point 1 of this agreement shall have similar application as it relates to the Blue Shield Executive Committee. A similar application of point 1 shall be inherent in those activities dealing with Government relations in areas of hospital matters for the Blue Cross Executive Committee.

The above arrangement establishes an identity specifically assignable to Blue Shield affairs and a similar identity to matters dealing with Blue Cross affairs. Further, by the granting of this autonomy to these Committees, we are assuring physician responsibility and activities in the area of Blue Shield matters and a like responsibility for activities on the part of the hospital members in the area of Blue Cross matters.

As a further point of consideration, future appointment of physicians to the Board of Trustees and ultimately to the Board of Directors of Blue Cross-Blue Shield of Alabama, should have at least two of these individuals who also serve as members of the Board of Censors of the Medical Association of the State of Alabama. This would create a strong line of communication between these two principal Boards and would insure that the feeling and attitudes of the Board of Censors would be adequately reflected in the activities of the Blue Shield Executive Committee and vice versa.

Upon final approval of this agreement by the Board of Censors of the Medical Association of the State of Alabama, the Board of Trustees of the Alabama Hospital Association and the Board of Directors of Blue Cross-Blue Shield of Alabama, it was recommended that a joint press release be issued taking full advantage of the terms of the settlement as being ultimately in the interest of the general public. It is also recommended

that no unilateral action in respect to press releases, either before or after final approval of the principles outlined in this report, shall be taken by either the Board of Censors of the Medical Association of the State of Alabama or the Board of Directors of Blue Cross-Blue Shield of Alabama.

It was the very sincere belief of all the members that the settlement outlined above was accomplished with an air of mutual faith and trust and carries with it the unqualified recommendation of all for approval between the two principals concerned, namely the Medical Association of the State of Alabama and Blue Cross-Blue Shield of Alabama.

It was recognized by all parties, however, that the agreement outlined above is in the nature of a trial agreement and that it can be determined only through experience and operation under the agreement whether it will be mutually satisfactory to the parties. Accordingly, it was agreed that the terms of the agreement shall be subject to review at the expiration of one year from its implementation and that in the event operation under the agreement is not then mutually satisfactory, the subject matter of the agreement will be renegotiated upon request by either party. It was agreed further that in the event upon such review the parties conclude that operation under this agreement is mutually satisfactory, the By-laws of the Corporation will be promptly amended so as to provide for the subject matter of the agreement.

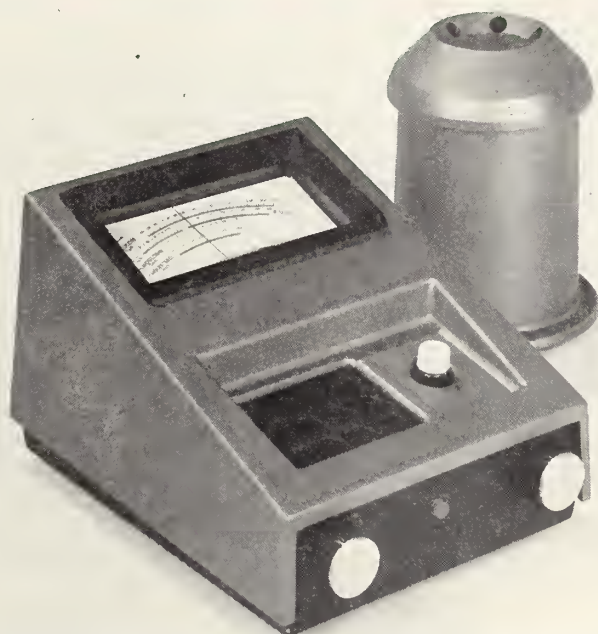
Reference is made to the last sentence of the first paragraph of page 2: "The full Board of Directors shall meet no less often than quarterly for the purpose of receiving, reviewing and passing upon the reports of the activities of the two Executive Committees and also to conduct those affairs of the Corporation that are not assignable to the separate activities of the two Executive Committees." In defining the Board of Directors as the responsible body for approving the

(Continued on Page 636)

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AGREEMENT REACHED WITH BS

(Continued from Page 634)

actions of the two Executive Committees rather than the Board of Trustees, it seems to be apparent that this is a natural line of responsibility more suitable to this activity rather than to make the Board of Trustees responsible for conducting the business affairs of the Corporation.

First of all, the Board of Trustees only meets annually and is composed of a membership that is not closely aligned with the daily operations of the Corporation and, as a result, not as knowledgeable a body as the Board of Directors in supervising the Corporate activities.

Second, it is a body that is not structured to conduct the business affairs of the Corporation. This power has been vested in the Board of Directors.

Third, the Blue Shield Executive Committee, in pursuing its activities, would have a great deal more strength in dealing with the Board of Directors of which it forms 50% of the membership as opposed to its representation on the Board of Trustees of which it would control only 9 of some 150 odd votes.

Fourth, the complications and size of the present Corporation activities are such that a more frequent review by a knowledgeable group of Directors is deemed essential. It would certainly appear that the membership of the two Executive Committees, recognizing their very great responsibility, would themselves insist upon this review authority being vested in the Board of Directors rather than in the Board of Trustees.

As further supporting evidence to point 2 of this report dealing with the accounting procedures of the Corporation, it is the sincere intent of the Corporation to make any adjustment in rates required to retain each activity in a self-sustaining position well within a period of six months from the time that either activity might reach a loss posi-

tion. The Corporation would adhere to the principle that rate adjustments would be instituted prior to the point where either of the two activities would reach a loss position and, as a result of this principle, the need of co-mingling of funds should be a rare occurrence.

In establishing a mechanism for allocating operational expenses equitable to both activities, it is the intent of the Corporation to develop a proration formula for purposes of making this allocation. The formula will be subject to examination and verification by public accountants in the same manner in which the separate accounts are subject to their scrutiny.

It is also the intent of the Corporation that premium income from the two activities will not be used to defray either the claim expenses or the operating expenses of the other unless the circumstances develop in which the co-mingling of funds is necessary to offset any losses, and then such co-mingling will be subject to the terms outlined in the third paragraph under point 2 of the report.

In order to insure that all facilities of the Corporation will be available to both Committees, the Staff of the Corporation will be available at all times to perform whatever functions they may be assigned by either Committee so that the Committees themselves may discharge their responsibility as efficiently as possible. In addition, there will be designated for each Committee a person who will be known as the "secretary" and further, a member of the Executive Staff will be available to attend all meetings of both Committees.

The above is some rationale behind two of the points contained in the report, and it is a sincere attempt to explain the reasoning behind the actions suggested. It is the hope that it will further clarify the interpretations applicable to the points being discussed.

BLUE CROSS-BLUE SHIELD AGREEMENT IN ALABAMA GIVES PHYSICIANS LOUDER VOICE IN OPERATIONS

Paul W. Burleson, M. D., Chairman

I. Historical Background

The organization which today is known as the Blue Cross-Blue Shield Corporation of Alabama was originally known as the "Hospital Service Corporation of Alabama" and came into being under the provisions of a legislative act during the 1935 regular session of the legislature of the state of Alabama. The "Hospital Service Corporation of Alabama" was empowered to provide plans for hospital care only, and the Medical Association of the State of Alabama was not represented in its original governing body. In 1945, however, the enabling act of the legislature was amended to allow the existing corporation to include medical, surgical, and obstetrical care as a part of any plan of hospital care established by it—and, in addition, this amendment authorized the admission of representatives of the Medical Association of the State of Alabama to its Board of Trustees. In 1951 the enabling act was further amended to permit the addition of representatives of the general public to the board of trustees of the corporation.

Under the terms of the certificate of incorporation, the Board of Trustees consists of one representative from each of the participating hospitals, together with six doctors "chosen and designated by the Medical Association of the State of Alabama from the membership of said association" and with six representatives of the general public. The management of the corporation is vested in a Board of Directors, which is composed of six representa-

tives of the hospitals, the six doctors designated by the Medical Association, and the six representatives of the general public.

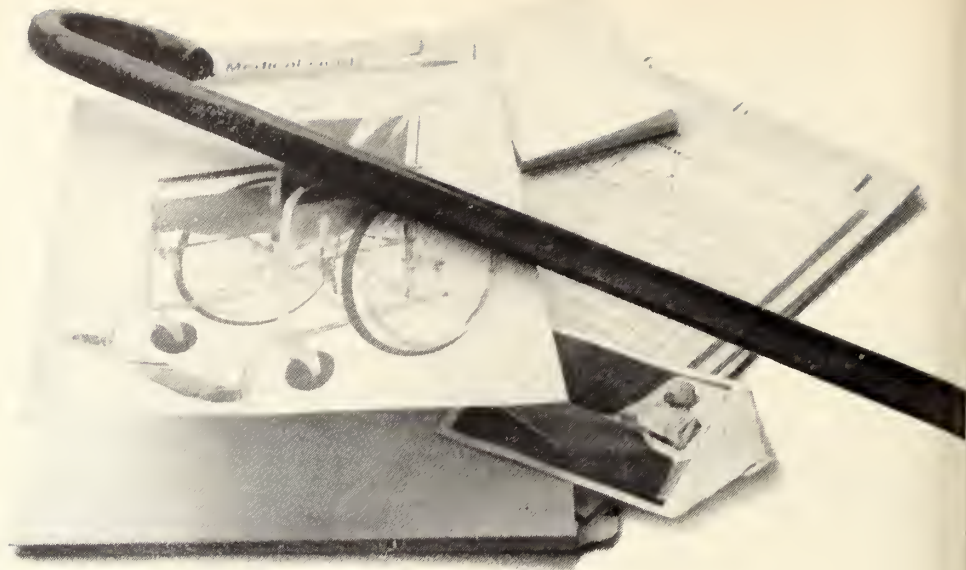
At the time of the expansion of the corporation's activities to include medical and surgical benefits, and of the admission of medical representatives to the Board of Trustees, it was generally understood by the medical profession, and made clear in its negotiations with the corporation, that the medical members of the corporation's Board of Trustees would have final authority with respect to the medical and surgical aspect of the corporation's activities. This intention was evidenced by Section 7 of Article I of the bylaws of the corporation, which provides as follows:

"Every member of the Board of Trustees shall be entitled to cast one vote either in person or by proxy on any question or matter which may come before any meeting of the Board; provided, however, that on all matters pertaining solely to the practice of medicine under the Blue Shield Plan in the State of Alabama, the six (6) medical members of the Board of Trustees shall possess and may exercise exclusive voting rights, privileges and powers."

It is the proviso of this bylaw, which was so strictly construed by counsel for the corporation, that gave the medical representatives final authority only with respect to standards of professional care and ethics. It deprived the six medical members of the Board of Directors of any realistic control over the terms, conditions, premiums, and benefits payable under policies bearing the "Blue Shield" designation. Because of this interpretation of the bylaw, the Medical Asso-

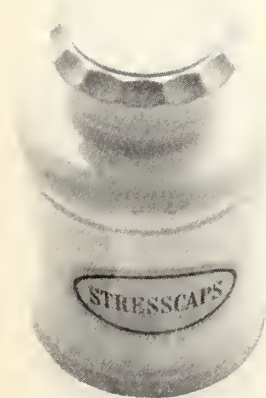
Text of statement delivered at called meeting of College of Counsellors and House of Delegates, Montgomery, Ala., Nov. 6, 1966.

(Continued on Page 639)



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BC-BS AGREEMENT IN ALABAMA

(Continued from Page 637)

ciation was compelled to challenge the corporation in this action.

II. Recent Historical Activities (September 1965-November 1966)

In September of 1965, Mr. H. F. Singleton, President of Blue Cross-Blue Shield of Alabama, requested that the medical members of the Board of Directors of the corporation advise him as to whether the corporation should agree to serve as intermediary under the medical provisions of the Medicare Act. At a regular monthly meeting of the State Board of Censors held on October 13, 1965, these medical representatives of the Blue Cross-Blue Shield reported to the Board of Censors that the Medical Association of the State of Alabama should approve the corporation as a carrier under part B on the condition that the Blue Shield activities of the corporation "be separated administratively" from the Blue Cross activities, and that "other controls be instituted to the satisfaction of MASA, within a fixed period of time." At this meeting the Board of Censors took the following position with respect to this question:

"At present the Blue Cross-Blue Shield of Alabama as constituted is unacceptable as intermediary and would be considered as fiscal agent only if Blue Cross-Blue Shield be separated and the Board of Directors of Blue Shield, when separated, be composed of a majority of physician members."

The Board directed Dr. James G. Donald, then president of the Medical Association of the State of Alabama, to appoint a special committee to study the possibility of separating the medical and surgical programs of Blue Cross-Blue Shield of Alabama from its hospital program, and to study and make recommendations concerning the appointment of the corporation as a medicare carrier.

Following the appointment of this special

study committee, it met on December 12, 1965, with the several representatives of the insurance companies which requested consideration for designation as carriers under part B, and one of which was Blue Cross-Blue Shield of Alabama. The committee was advised at this time by some of the medical members of the Board of Directors of Blue Cross-Blue Shield, that the following amendment to Section 5 of Article II of the bylaws for the corporation had been approved by the Directors:

"Four members of the Board of Directors shall constitute a quorum for the transaction of business. Each member of the Board shall be entitled to one vote, if present, on each question coming before the Board. The six doctor members of the Board of Directors who are serving thereon by virtue of having been designated as members of the Board of Trustees by the Medical Association of the State of Alabama, and having been elected as such at the regular annual meeting of the Board of Trustees, shall constitute a standing committee of the Board of Directors to be known as the Committee for Medical Affairs. Three members of said committee shall constitute a quorum. A quorum of the Board of Directors being present, a majority of those present and voting on any question shall prevail, except that any question affecting: (1) fee schedules, (2) income limits, and (3) benefits under the corporation's contracts providing paid-in-full medical coverage, shall, to prevail, require not only the affirmative vote of a majority of the members of the Board present and voting but also a like affirmative vote of the Committee for Medical Affairs."

It was the recommendation of these medical representatives, that, if the foregoing bylaw be adopted by the Board of Trustees of the corporation, the corporation be listed as an acceptable carrier.

After thorough study and discussion, the special study committee recommended that

(Continued on Page 641)

Frankly, most antihypertensives are pretty good if you give an adequate dose. I'm looking for one with a simple regimen so that mix-ups in doses and therefore the chance of side effects are minimized.

Regroton®

chlorthalidone 50 mg, reserpine 0.25 mg.

1 tablet daily
brings pressure down

Advantage: Both components of Regroton are long-acting.

Average dosage: One tablet daily with breakfast.

Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.

Warning: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.

Side effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness.

For full details, see the complete prescribing information.

Availability: Bottles of 100 and 1000 tablets.

Geigy



BC-BS AGREEMENT IN ALABAMA

(Continued from Page 639)

on the condition that the foregoing bylaw be adopted by Blue Cross-Blue Shield of Alabama, all companies appearing as candidates for designation as carrier be accepted without preference of one over the other.

These recommendations were brought before the Board of Trustees of the Medical Association of the State of Alabama on December 14, 1965, and this Board recommended that Blue Cross-Blue Shield be considered acceptable as a carrier for the Medicare Act upon the condition that the amendment to the bylaw be passed by the Blue Cross-Blue Shield Board of Trustees. This amendment was passed by the corporation's Board of Trustees at a special meeting held in Birmingham on December 15, 1965.

On the same date the Board of Censors met and considered the question of designation of the corporation as a carrier under part B. At that meeting the Board reaffirmed its previously stated position, that as presently constituted, the corporation was unacceptable as a carrier. It was the feeling of the Board that the foregoing amended bylaw granted only a limited veto power and was inadequate to confer upon the medical members of the Board of Directors supervision over the fee schedules and other administrative matters arising under the Medicare Act. Accordingly, the Board directed Dr. Donald to advise the Secretary of the Department of Health, Education and Welfare that Equitable Life Assurance Society of the United States and Life Insurance Company of Alabama were acceptable, without preference of one over the other, as carriers. Dr. Donald so advised the secretary by telegram dated December 15, 1965.

It was at this time that the Board of Censors, after careful deliberation, decided that the time had come for steps to be taken to effect a separation of the Blue Shield from Blue Cross activities. It was felt that an administrative separation should be attempted if possible so as to not disrupt the corporate

structure of the Blue Cross-Blue Shield organization.

As we all are aware an Ad Hoc Committee was appointed by the chairman of the Board of Censors, which was authorized to meet with a similar committee from the Blue Cross-Blue Shield to try and effect an administrative separation. The committees met and chose subcommittees from their ranks to carry on further studies in an effort to negotiate the differences, which were brought out in the initial Ad Hoc Committee meeting.

The results of these attempted negotiations were basically unrewarding and it was on this note that the Ad Hoc Committee of the Board of Censors presented its report and recommendations to the Board of Censors at the April meeting, this year, in Mobile. The resolution which was brought out from the Board of Censors, as result of this report, was adopted by this House of Delegates and College of Counsellors. (A copy of this resolution is printed on the first page of the supplement to the counsellors and delegates handbook which was passed out to you this morning.)

As we recall this resolution spelled out the three basic demands, namely (1) the six medical members of the Board of Directors of the corporation, voting as a group or in conjunction with three members of such Board representing the general public, shall have sole and final authority with respect to the terms and conditions of the premiums and benefits payable under any insurance contract now issued or to be issued in the future by the corporation, and providing in whole or in part medical and/or surgical coverage without regard to whether such contract shall be termed an "indemnity," "service," "paid in full" or "prepaid" contract and without regard to whether such contract shall be termed a Blue Shield contract or rider, (2) the six medical members of the Board of Directors of the corporation, voting as a group, or in conjunction with three members of such Board representing the general public, shall have sole and final

(Continued on Page 642)

BC-BS AGREEMENT IN ALABAMA

(Continued from Page 641)

authority with respect to the terms, conditions and administration of any plan, agreement or contract between the corporation and the federal government under which the corporation shall serve as intermediary or carrier, and (3) the corporation shall keep separate accounts and render to the six medical members of the Blue Shield Board and the public separate annual accountings certified by independent public accountants, with respect to the receipt of premiums and the disbursement of allowed claims under its (a) hospital service contracts, and (b) its medical and/or surgical contracts. Further it was stated that no part of the funds received by the corporation as premiums under such "Blue Shield" contract or riders shall be paid out for other than medical and/or surgical claims arising under such contracts or riders, except that such funds may be used to defray the general administrative and overhead costs and expenses of the corporation.

The resolution stipulated that if by November 1, 1966, these recommendations were effectively implemented, the Medical Association of the State of Alabama would continue its relationship with Blue Cross-Blue Shield of Alabama.

Following the Mobile meeting the Board of Censors empowered its same Ad Hoc Committee to continue negotiations on the basis of this resolution as just outlined.

Nothing of significance was accomplished in this regard until the latter part of June of this year, when members of the Ad Hoc Committee who were attending the meeting of the American Medical Association in Chicago contacted members of the staff of the National Association of the Blue Shield Plan. As a result of an executive session of these two groups, Dr. Carl R. Ackerman, chairman of the Board of National Blue Shield, and Mr. John W. Castilucci, its executive vice president, agreed to come to Alabama in an effort to try and expedite negotiations between the

Medical Association of the State of Alabama and the Blue Cross-Blue Shield Corporation. In a series of conferences held in Birmingham in August of this year, these officers from the National Blue Shield brought out a proposed "white paper" as a basis for further discussion and they recommended that the existing differences could and should be settled at once. They were optimistic about the possibility of an amicable settlement. This visit by these gentlemen from the National Blue Shield organization set in motion again a series of meetings of representatives of the two Ad Hoc Committees which after long, and may I say, arduous hours at the negotiating table, ironed out the basic problems and differences which existed. On the evening of September 22, 1966, a final meeting was held between the conferees which resulted in a report which, after being ratified by the Board of Censors, the Board of Directors of Blue Cross-Blue Shield, and the Board of Trustees of the Alabama Hospital Association, is to be presented to this special called meeting of the Medical Association of the State of Alabama at this time.

It is the feeling of the Ad Hoc Committee, and is concurred in by the entire Board of Censors, that this "memorandum of agreement" gives the Medical Association each and every demand which was set forth in the resolution adopted at the April meeting in Mobile.

III. Agreement and Addendum

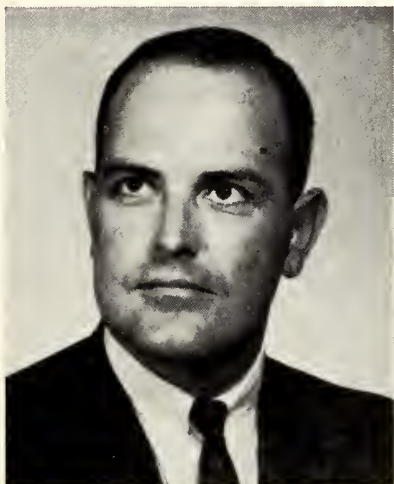
IV. Responsibilities of the Medical Profession to Blue Cross-Blue Shield of the Blue Shield Board of Directors

Now that proper authority has been given to our duly appointed representatives to the Blue Shield Board as stipulated in this agreement, we must fix attention on our responsibility. First, we must remember that our primary obligation is to render the best possible medical care to all of our patients. In order to do this, our patients must be able to

(Continued on Page 648)

In Alabama . . .

These Syntex men serve the physician



Robert Boothe
Birmingham, Alabama
853-0406



Ernest Haydel
Mobile, Alabama
342-2660



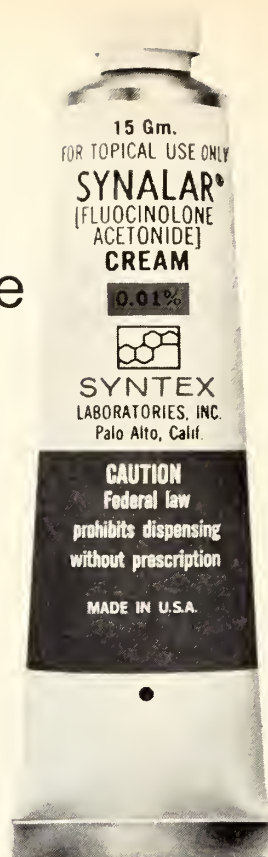
Dewey Long
Jackson, Mississippi
362-8898



Ralph Lurie
Birmingham, Alabama
871-2996

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Synalar 0.01
(fluocinolone acetonide) cream
15 Gm.

for even greater
economy in
office or hospital
practice

the superiority topical with the

Now you can prescribe as little or as much Synalar Cream 0.01% as is needed for a particular therapeutic problem in a size that permits the greatest economy for your patient. The new 15 Gm. tube, for example, is best suited for short-term therapy and for small sites. For more extensive body areas prescribe the 45 Gm. tube—a size that's also ideal for your treatment table. And the 120 Gm. jar is most economical for hospital use. Thus, with Synalar Cream 0.01%, you have the superiority of a modern topical corticosteroid shown to be more effective than 1% hydrocortisone¹⁻³ plus the economy that makes therapy practical for use in more dermatologic conditions, in long-term maintenance, with occlusive dressings in resistant cases, and in extensive area involvement.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** 1. *General*—Synalar Cream 0.01% is virtually nonsensitizing and nonirritating. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to

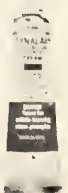
have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. 2. *Occlusive dressing method*—With occlusion of extensive areas, systemic absorption of the corticosteroid may occur, and suitable precautions should be taken. Occasional patients may show contact sensitivity to a particular dressing material or adhesive. Miliaria, folliculitis, and pyoderma have been seen infrequently with the use of this technique. The development of infection requires appropriate antibacterial therapy and continuation of the occlusive dressing method. Local atrophy and telangiectases have been reported with protracted occlusive dressing therapy. While relapses can be expected to occur in many psoriatic patients, remissions may persist for several weeks to several months in favorable cases. A patient whose psoriasis is in an active stage, with recent appearance of lesions, may not be a good candidate and may show early relapse. Plastic films may be flammable, and due care should be exercised in their use. Similarly, caution should be employed when such films are used on the face of children to avoid the possibility of accidental suffocation. **Effects:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. **References:** 1. Cahn, M. I., Levy, E. J.: *J New Drugs* 1:262 (Nov.-Dec.) 1961. 2. Meenan, F. O.: *Med Ass* 52:75 (Mar.) 1963. 3. Robinson, H. M., Jr., Raskin, J., and Dr. W. J. R.: *Southern Med J* 56:797 (Jul.) 1963.

of a modern corticosteroid economy of hydrocortisone

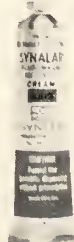
Now... a choice of 3
economical sizes



120 Gm. jar



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fluocinolone acetonide — an original steroid from

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Norinyl[®] tablets

(norethindrone 2 mg. \bar{c} mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

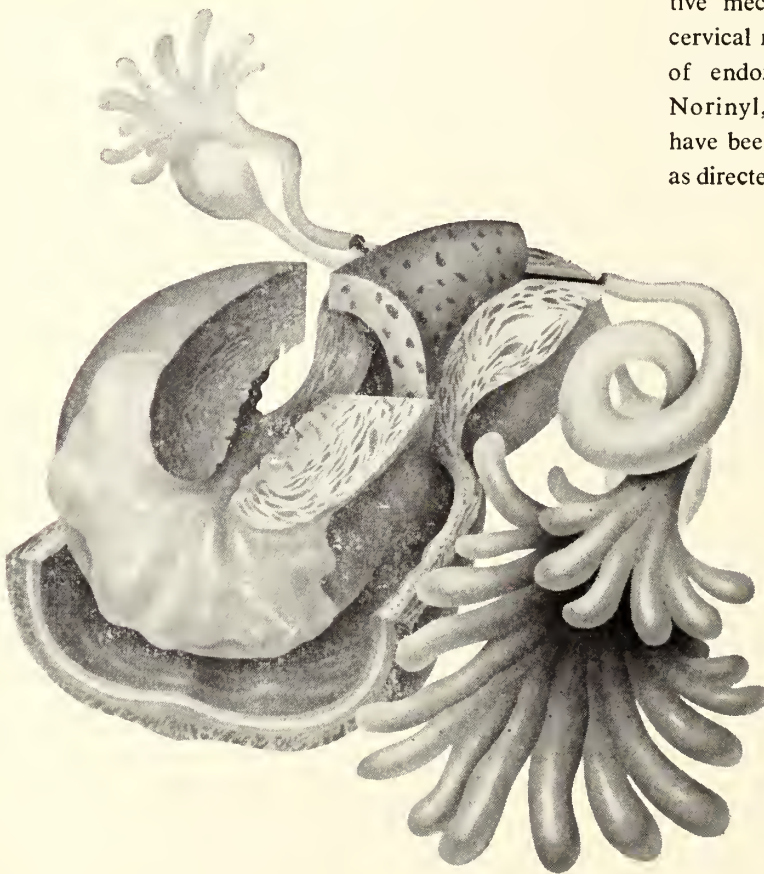
**inhibition of ovulation by means of
2 time-proved hormonal agents**

**production of a cervical mucus hostile to
sperm motility and vitality**

**creation of an endometrium unreceptive
to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxy-corticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs JAMA 187:664 (Feb 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W. Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
SYNTEX
LABORATORIES INC. PALO ALTO, CALIF.

Norinyl[®] tablets
(norethindrone 2 mg. & mestranol 0.1 mg.)

for multiple contraceptive action

BC-BS AGREEMENT IN ALABAMA

(Continued from Page 642)

pay for their care to the best of their ability and as inexpensively as possible. We as physicians must educate them to get the better policies which will be brought out by our Blue Shield committee. In order to present to the public policies with better, and at the same time less expensive benefit coverage, we must see to it that a greater number of our patients are encouraged to acquire this medical insurance, and thus help lower the premium rates. The policies which will be worked out in the future will offer much more realistic coverage to the patient during his time of illness and the benefits which he will receive for the money paid out for premiums will be more in line with his actual needs. How often have we seen patients discharged from the hospital sadly disappointed and frequently insulted with their insurance coverage when they find that although the hospital bill is paid "in full," the doctor bill is covered only to the tune of a mere pittance? These experiences have put us doctors and our profession in an extremely poor light, and has often damaged our image with the public, and our professional relationship with our patients.

What then does the new relationship with Blue Cross-Blue Shield mean to you and me as physicians? It must, as stated, improve the doctor-patient relationship. In addition it should certainly result in a more equitable and fair compensation for our professional services.

Finally, we should have confidence in our new relationship with Blue Cross-Blue Shield based on the knowledge that for the first time in modern history, we, the physicians of Alabama, control the activities of the medical and surgical coverage of Blue Cross-Blue Shield which, incidentally, is the largest medical-surgical insurance carrier in the state.

Let us now then "go forward" and I quote "with vigor" to make this the best medical insurance plan in the United States.

**Lessens motility,
reduces secretions and
maintains mild sedation
in the ulcer patient**



ANTROCOL[®]

**ANTISPASMODIC
ANTISECRETORY
SEDATIVE**

Each tablet or capsule contains Atropine sulfate 0.324 mg. Phenobarbital 16 mg. Warning, may be habit forming. *Ben-sulfoid 65 mg. *See White Sec. P.D.R. p. 851.

INDICATIONS: Peptic ulcer. Functional digestive disturbances.

DOSAGE: In peptic ulcer 4 to 8 tablets or capsules per day. Dryness of mouth is a guide to proper dosage in acute ulcer. As the ulcer heals, increased sedation is an indicator to reduce dosage. In functional digestive disturbances, 1 tablet or capsule every six hours maintains sedation at the threshold of calmness. The mild antisecretory action does not disturb the average patient.

SIDE-EFFECTS: Dryness of mouth, blurred vision and difficult urination.

PRECAUTIONS: Use cautiously in prostatic hypertrophy. Do not use in glaucoma.

*Tablets packaged in bottles of
100, 500 and 5000*

*Capsules packaged in bottles of
100, 500 and 1000*

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Manufacturers of ethical pharmaceuticals since 1856



Now, now, Mrs. Forsythe, we've never lost a cold patient yet.

When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes dissatisfied about her condition.

She will breathe easier when you prescribe Novahistine LP. Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the morning and repeated in the evening will usually keep air passages clear for 24 hours.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention.

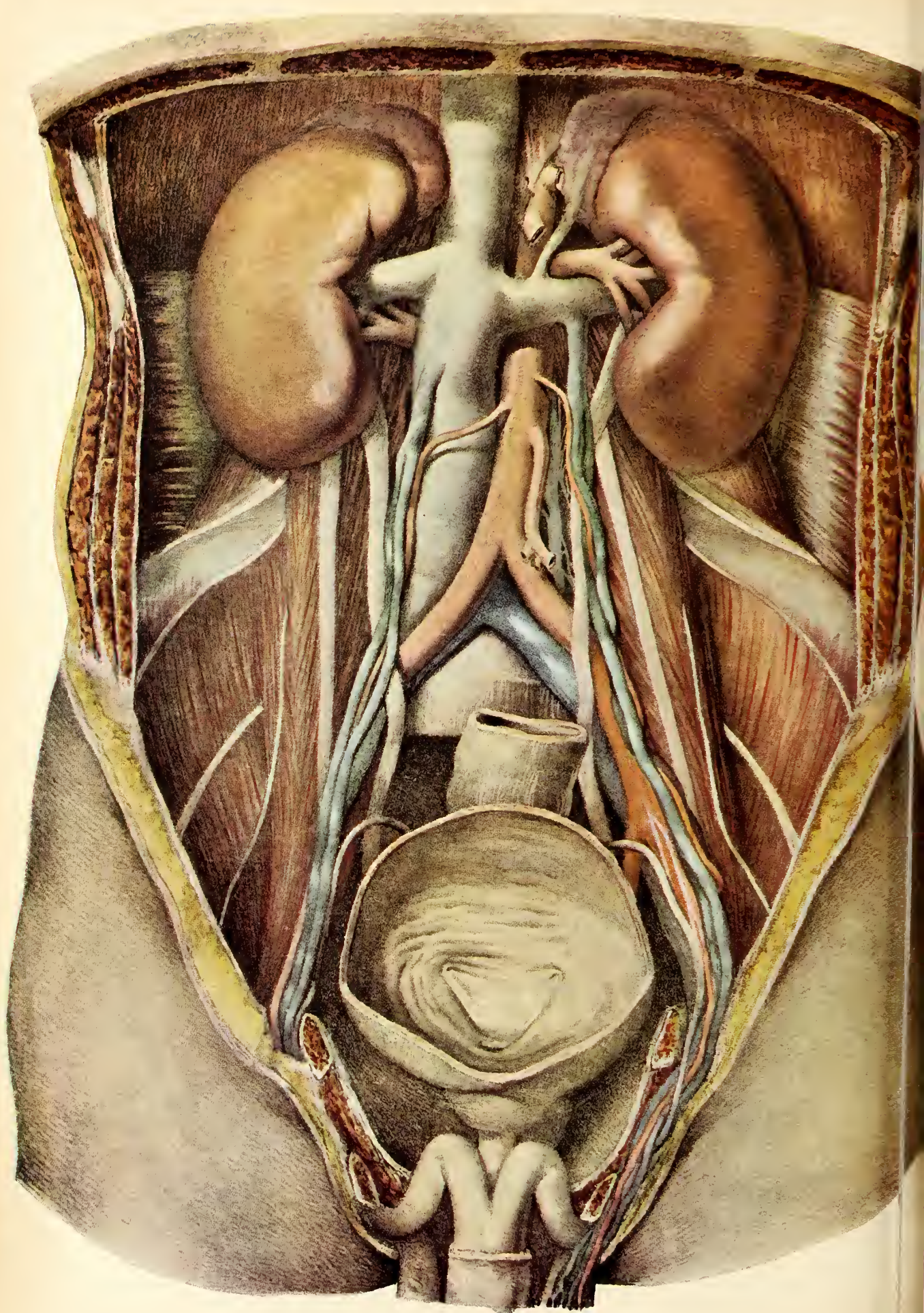
Caution patients who operate machinery or motor vehicles that drowsiness may result.

Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis 

NOVAHISTINE[®] LP

For relief of nasal congestion.



Wide-range bactericidal action for genitourinary infections

NEW OMNIPEN[®] (AMPICILLIN) WYETH

A penicillin that exhibits effectiveness within the gram-positive spectrum of penicillin G* and the gram-negative spectrum of chloramphenicol and the tetracyclines.*

Active at foci of infections—kidney, ureter, bladder or urethra.

Effective against many gram-negative and gram-positive pathogens—thus may be valuable not only in genitourinary but also in common respiratory and gastrointestinal infections.

Normally produces high and persistent levels in blood and high concentrations in bile and urine.

Significant inherent stability.

**Exclusive of penicillinase-producing bacteria.*

Indications: Urinary tract infections, especially those caused by *E. coli*, *Proteus mirabilis*, and *Streptococcus faecalis* and *viridans*; respiratory infections caused by *H. influenzae*, pneumococci, streptococci, and nonpenicillinase-producing staphylococci; and gastrointestinal infections caused by *Shigella* and *Salmonella*, including *Sal. typhosa*.



Contraindications: Hypersensitivity to penicillin; infections due to penicillinase-producing staphylococci and other penicillinase-producing bacteria.

Precautions: If allergic reaction occurs, discontinue ampicillin and administer epinephrine, corticosteroids, antihistamines and/or pressor amines as indicated. Transient moderate

elevation of SGOT values of undetermined significance was noted in a few infants. Liver and kidney function as well as hematopoietic tests are advisable during therapy, particularly in infants. As with other antibiotics, precautions should be taken against gastrointestinal superinfection. Safety for use in pregnancy has not been established.

Adverse Reactions: Occasional mild side effects as urticaria, skin rash, pruritus, diarrhea, nausea and vomiting. There have been no reports of blood dyscrasias, liver or kidney damage. Anaphylaxis has been reported.

Composition: Capsules, 250 mg.
**American Hospital Formulary
Service Category No. 8:12.16.**

Wyeth Laboratories Philadelphia, Pa.





"Yes, Doctor, the pain is gone."

- Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

'Empirin'® Compound with Codeine Phosphate gr. ½ No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.



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PHYSICIANS, CORPORATION, AND INSURED PUBLIC TO BENEFIT FROM BLUE SHIELD PROPOSAL

By

William E. Miller, Jr.

Executive Vice President, Blue Cross-Blue Shield of Alabama

Mr. President, Officers, Delegates and Guests. I would be remiss if I did not take this opportunity to express my very sincere appreciation for the invitation extended to me to spend a few moments this morning talking about what at one time may have been a dirty word, Blue Shield. I should also like to express a very personal appreciation for this opportunity. I think you should know also that the physicians who acted in your behalf on your Ad Hoc Committee did a very noble job. They were men of dedication, integrity and with a very sincere desire to accomplish a marriage between the association and the corporation. This, I sincerely believe, they have accomplished. You should also be aware that the individuals they met with from the corporation's side of these discussions were also men with the same qualities as your representatives. Without these ingredients, we would have never reached this plateau. Many things entered into these discussions. However, if I had to identify the principal ingredient, I would have to use such words as, *faith, trust, confidence and a willingness to experiment* with a solution, and re-evaluate the basis of the solution after a trial period of implementation.

Dr. Burleson has done an excellent job in reporting to you the historical background of these discussions, and has brought you up to date to the point where he read the final document that has now been approved as the *working agreement* for the next twelve months. He had facts to present, and reported things that *have happened*. I have been assigned the unenviable job of trying



William E. Miller, Jr.

to project some things that I believe *will happen* as a result of this merger, so to speak. I am an amateur forecaster at best, but let's take a look at what my little crystal ball suggests as future activities for the corporation, in light of our settlement.

One of the first things you should know is that the corporation is dedicated to the proposition that the agreement is workable—that it will work—and that we will use every facility at our command to assure that we live up to the terms and conditions of the agreement. I caution you, however, that this is a two-way street. This means an acceptance and a cooperative attitude on the part of the medical profession toward Blue Shield in its new form, that will be required to insure success. I foresee the gaining of some 2,600-odd additional salesmen, for instance, represented by the physicians throughout the state of Alabama, that can well be the best line of communication for passing on to the

Text of remarks delivered at Called Meeting of the College of Counsellors and House of Delegates held in Montgomery, November 6, 1966.

public the merits of Blue Cross-Blue Shield. Your patient-doctor relationships put you in an enviable position to sell the principle of prepayment through the Blue Shield image. Our obligation in this respect is to assure you of more adequate reimbursement through upgrading of antiquated fee schedules, and an acceleration in the "phasing-out" process for those schedules that are no longer reasonable in relation to physicians' charges. Your Blue Shield executive committee will face this challenge as one of its first projects, I am sure. I like to think that the words, "*usual*" and "*reasonable*" and "*customary*" and "*prevailing*" will become far more meaningful as related to payments made under projected new Blue Shield programs. I am almost certain that the reference to "*paid-in-full*" programs will be an agenda item before very much longer for your Blue Shield Executive Committee. Whether we like the principle or the concept or the philosophy behind "*paid-in-full*," I think we are all practical enough to recognize that no longer is it only the unions that are seeking this sort of predictable medical cost programs, that now management more and more is talking in such terms. I think medicare has had a direct effect on these considerations.

My little crystal ball tells me that we potentially have in the future—and not too distant future at that—the advent of more government-sponsored programs. I have in mind, specifically, *Title XIX*, which is just over the horizon as most of you, I am sure, are aware. Whether or not the corporation will have a direct role in this act, I do not know. I do know that the implementation of the act will have an effect on the corporation's activities, primarily because of the many thousands of people who will become eligible for the program benefits. Your Blue Shield executive committee will have occasion, I am sure, to wrestle with this government activity.

It doesn't take much of a forecaster to predict a very sizeable increase in our professional relations activities under the direct

supervision of your committee. I can see the expansion of professional relations representation covering all parts of the state available to you to meet with hospital staffs, to meet with county medical societies, and to become "detail men" in the sense that they will be calling at your offices to help solve problems and to keep you current on activities of the corporation. I see a Blue Shield bulletin being distributed monthly to every physician in the state of Alabama, containing information dealing with the socioeconomic side of the practice of medicine. This professional relations activity, I feel, represents one of the most important aspects of our future activity.

I insist on seeing in the immediate future an improvement in our claims processing and payment for physicians' services—something that must be done under any circumstance.

I am certain of another thing; that at the end of this twelve months period, our corporation by-laws will be amended to reflect the formalizing of our working agreement.

My crystal ball gets a little hazy here, but I think I see the simplification of the Blue Shield claim form and a reduction in the amount of paper work now required of your office girls. And I see among all this a citizenry of the state of Alabama that will reap the rewards of all of our activities, and this, after all, is our purpose and our reason for being.

We shall reach the point where the corporation's activities, influenced to a great degree by dedicated physicians, will insure the public of the finest choice of Blue Shield programs offered anywhere in these United States.

Again, let me express my appreciation and sincere thanks for this opportunity to meet with you for these few moments, and I would only hope that my amateurish forecasting will not be totally without some degree of fulfillment.



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

PARKWOOD HOSPITAL

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INTERNATIONAL MEDICAL ASSEMBLY TO MEET

The 31st Annual Session of the International Medical Assembly of Southwest Texas will be held in San Antonio, Texas, January 23, 24, and 25, 1967, at the Gunter Hotel. The seventeen guest speakers will be:

Anesthesiology—David M. Little, M. D., Hartford, Connecticut.

Dermatology—David Goe Welton, M. D., Durham, North Carolina.

Immunology—Leo H. Criepp, M. D., Pittsburgh, Pennsylvania.

Internal Medicine—A. D. Dennison, Jr., M. D., Indianapolis, Indiana.

Internal Medicine—Morton H. Maxwell, M. D., Los Angeles, California.

Internal Medicine—Demetrio Sodi-Palares, M. D., Mexico City, D. F.

Internal Medicine—Priscilla White, M. D., Boston, Massachusetts.

Obstetrics & Gynecology—D. E. Cannell, M. D., Toronto, Ontario, Canada.

Pathology—Frank Vellios, M. D., Indianapolis, Indiana.

Pediatrics—William J. Mellman, M. D., Philadelphia, Pennsylvania.

Psychiatry—William Preston Wilson, M. D., Durham, North Carolina.

Radiology—John R. Hodgson, M. D., Rochester, Minnesota.

Surgery—Daniel C. Campbell, Jr., Col. USAF, MC, Scott Air Force Base, Illinois.

Surgery—Wm. D. Logan, Jr., M. D., Atlanta, Georgia.

Surgery—Owen H. Wangenstein, M. D., Minneapolis, Minnesota.

Surgery—David Hume, M. D., Richmond, Virginia.

Ophthalmology—Herbert M. Katzin, M. D., New York, New York.

This program is acceptable for 15 ac-

credited hours by the American Academy of General Practice. In addition to the scientific program, there will be many social events for the physician and wife. Also a three day post convention trip to Mexico City has been planned. Those interested in receiving further information or registering may write to Dr. John H. Bohmfalk, President, or Mr. S. E. Cockrell, Jr., Executive Director, 202 West French Place, San Antonio, Texas 78212.

Cancer Center Opens

The Department of Obstetrics and Gynecology, Duke University Medical Center, announces the establishment of the SOUTH-EASTERN REGIONAL CENTER FOR TROPHOBLASTIC NEOPLASMS. This Center is sponsored by a Health Service Project Grant Award from the Department of Health, Education and Welfare, Division of Chronic Diseases.

This project in Cancer Control is established for the purpose of providing urinary gonadotropin assays and consultative assistance to physicians to aid in evaluation of patients who have or are suspected of having abnormalities in trophoblastic tissue growth.

Beginning September 30, 1966, physicians desiring gonadotropin assays for patients with placental abnormalities as molar degeneration, hydatidiform mole, syncytial endometritis, chorio-adenoma destruens and choriocarcinoma may call or write the Center at Duke University Medical Center, Durham, North Carolina (Area Code 919, 684-8111).

Roy T. Parker, M. D.

C. D. Christian, M. D.

Charles B. Hammond, M. D.

HOSPITAL-BASED REIMBURSEMENT PLANS LISTED

Final regulations governing reimbursement of hospital-based physicians have been published in the *Federal Register*.

The services of these physicians to individual medicare beneficiaries are covered under Part B. Other physician services in a hospital, such as teaching, administration, etc., that benefit patients generally, are covered under Part A, the basic hospital insurance part of medicare.

Hospitals may continue to follow the usual practice of billing patients for the services of the hospital-based physician along with the related costs—if this is acceptable to the physician—or the physician may bill the patient directly for his services. Under either method of billing, however, the charges for services the hospital-based physician furnishes to individual patients must be separately identified and billed to the medical insurance plan, while hospital costs associated with the services must be billed to the basic hospital insurance plan.

Three substantive changes have been made in the regulations.

Under one change, the optional simplified billing method that would previously have been limited to pathologists and radiologists, may be used in billing for other services. Under the final regulations, this optional method, involving the use of a uniform percentage for determining the amount of hospital-based physicians charges, may be used in figuring the charges for any physician's services which have not been separately identified under previous billing practices of the hospital.

Another change affects hospitals which do not itemize services rendered to individual patients, but instead include them in the institution's general overall charge for ser-

vices. The change makes it unnecessary for these institutions (mainly tuberculosis and psychiatric hospitals) to itemize physician's services for medicare purposes and permits payment under the program on a per diem or per visit basis.

The third modification takes account of the situation where a physician providing patient care in a hospital is paid for these services by a medical school, a State, municipality, or other private or public organization. Under the final regulations, the compensation received by the physicians from such sources can be taken into account in determining the physicians' charges that are reimbursable under the medical insurance part of the medicare program.

REFERENCE LISTS

How long should reference lists be? There is rather general agreement that in most of the articles in state journals a list of five or six references will usually be adequate. Except in special review articles, or research articles, complete lists of references are not needed, and, in fact, are out of place. A general guide is to include in a reference list: (1) Only articles which have actually been read in the original (not an abstract or a translation) and (2) Only articles which are actually mentioned in the text of the paper.

How many reference numbers should be in the text? Remembering that they are distracting to the reader as he goes through the article, they should be eliminated if they serve no purpose. If a quoted author appears in the reference list only once, it is obvious that this is the article to which reference is made, and no "superior number" is necessary for it cannot be confused. Papers are written to be read, and it is desirable to keep them interesting and to avoid distractions whenever possible.

MOST RADIOLOGISTS SUBMITTING SEPARATE BILLS

More than half of the nation's radiologists are sending and collecting bills for their professional services to patients in hospital x-ray departments, according to returns from a September survey of its members by the American College of Radiology.

Based upon a total of 2768 replies from a questionnaire sent to some 5800 radiologists in active practice in this country, slightly more than half of those practicing in voluntary hospitals are billing for all or a majority of their professional services entirely separately from hospital charges.

The replies indicated that 1031 radiologists or radiological groups are billing for all services and an additional 295 now bill for services in one or more of several hospitals covered. Another 642 radiologists reported that negotiations with hospitals to begin separate billing are still underway or that they expect to begin in January 1967 or later.

Some 250 respondents indicated no intention to seek separate billing and 540 said that their practice did not include a voluntary hospital department. These included radiologists in federal service, in full-time teaching or research positions, those practicing only in an office or those recently retired.

"This result puts us well ahead of our prediction that half of the radiologists would make the change by the end of 1966," said ACR President Dr. Jackson E. Livesay of Flint, Michigan. "There has been opposition to separate billing from hospital organizations and from certain insurance carriers in some parts of the country. But much of this is disappearing as the opponents see that separate billing can work to the benefit of all concerned in other areas."

The survey of its members is the second made since the College policy urging sepa-

rate billing was adopted in October 1965. At that time, an overwhelming majority of radiologists allowed hospitals to collect their fees for them. The arrangement had resulted in numerous problems between radiologists and hospitals and had led to serious gaps in voluntary health insurance coverage of radiology services.

The first billing survey in May indicated that only 139 of 2224 responding radiologists had begun separate billing by that time. Most of the radiologists now doing their own billing began July 1, coincident with the advent of medicare. Those indicating an October 1 beginning were counted as billing separately.

Among the 295 radiologists reporting partial separate billing, most respondents indicated that the change has been made for one or more hospitals out of a group of several. Others said they now bill medicare patients and some bill directly for radiation therapy but not for the general range of diagnostic services.

Some of the responses in all categories reflected a change for a radiologic partnership involving as many as 14 radiologists and covering six or eight hospital x-ray departments. However, these were scored as one reply unless each doctor involved was named.

Among the radiologists beginning separate billing, some have employed extra clerks to handle the bills and collections. Others have retained a commercial billing service and some reported working out an arrangement with the hospital to perform their billing on a straightforward and separate basis from hospital billing.

* * *

If nobody knows the trouble you've seen, you're not living in a small town.

ESSAY CONTEST PLANNED BY CHEST PHYSICIANS

The American College of Chest Physicians offers three cash awards to be given annually for the best essay prepared by undergraduate medical students on any phase of the diagnosis and/or treatment of chest diseases (heart or lungs).

The First Prize will be \$500; Second Prize, \$300 and Third Prize, \$200. Each winner will also receive a certificate of merit. A trophy inscribed with the name of the winner and the name of his school will be presented to the winner's school.

Since the Essay Contests were initiated in 1950, cash prizes totaling more than \$14,000 have been awarded to students in many parts of the world. Beginning in 1967, the College Essay Contest will be known as the Alfred A. Richman Essay Contest. Through a generous grant made by Dr. Richman, New York City, Vice-Chairman of the Council on Inter-

national Affairs, funds have been provided for the continuance of this important aspect of the College program. As in the past, the Essay Contest will be open to undergraduate medical students throughout the world.

The winners will be announced at the 33rd Annual Meeting of the American College of Chest Physicians, to be held in Atlantic City, New Jersey, June 15-19, 1967.

The official application form, sample copies of the journal and additional information may be secured by writing Mr. Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Illinois 60611, U. S. A.

* * *

Life can be pretty grim when you reach 80, especially if there's a police car behind you.

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Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

NEW NAME FOR MED CENTER

The name of the Institute of Physical Medicine and Rehabilitation of New York University Medical Center has been changed officially to the Institute of Rehabilitation Medicine effective Sept. 1.

The announcement of the name change was made by Dr. George E. Armstrong, director of the Medical Center, with the approval of the Board of Trustees of New York University. At the same time he announced that the Department of Physical Medicine and Rehabilitation had been renamed the Department of Rehabilitation Medicine.

Since the term "physical medicine" was applied initially only to the orthopedically handicapped, it was felt that "rehabilitation medicine" would better describe the total concept of rehabilitation.

Today the field has expanded to include the rehabilitation of cardiac, pulmonary and cancer patients, among others. Rehabilitation medicine is a total program designed to meet the physical, emotional, social, vocational and educational needs of the individual.

The Institute of Rehabilitation Medicine, under the direction of Dr. Howard A. Rusk, is the largest university center in the world for the rehabilitation of the physically handicapped. It is located at 400 East 34th Street in Manhattan.

The first pelvic cancer control program for women in the Philadelphia area under the new law establishing regional centers to combat heart disease, cancer, and stroke will start soon at Fitzgerald Mercy Hospital in Darby. The project director expects to use all available modern techniques of detection and treatment. Provision will be made for home nursing visits for women who cannot leave their homes.

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who need
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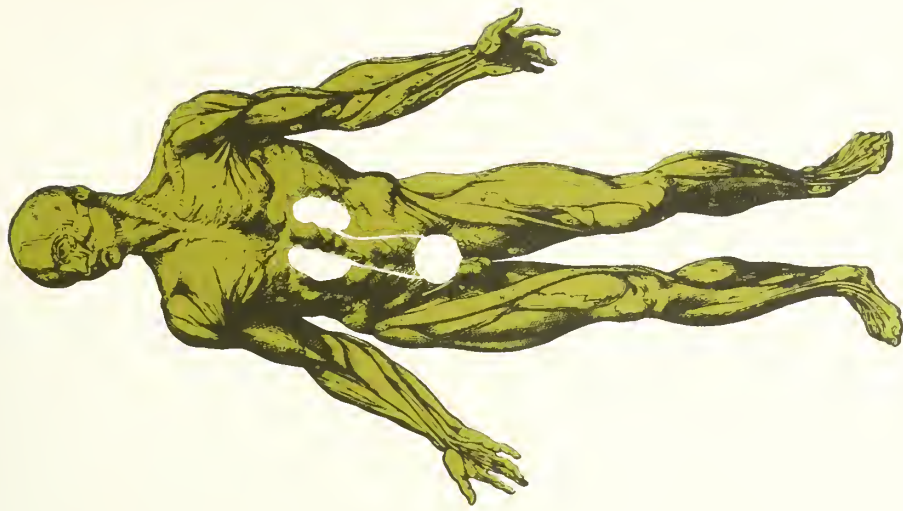
Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

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muscle spasm



GENITOURINARY TRACT SPASM

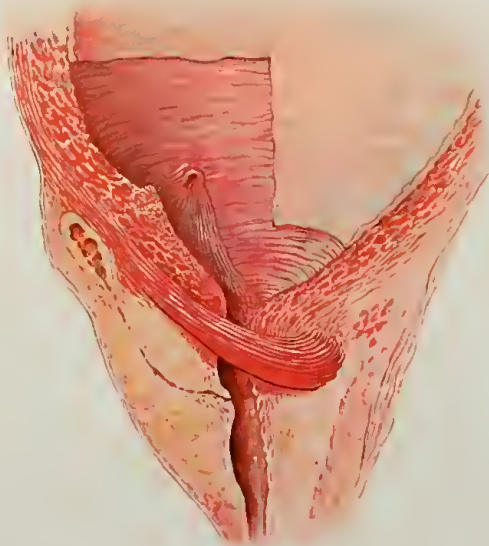


GENITOURINARY TRACT SPASM

Spastic conditions of the genitourinary tract as a result of inflammation or calculi are often difficult to treat due to the combination of voluntary and involuntary neural control of the system. Urine enters the bladder in periodic spurts brought about by successive peristaltic waves that begin in the smooth muscle of the renal pelvis and pass downward. The normal anatomical constrictions of the ureters are of clinical importance because they frequently inhibit the passage of small calculi.

Abnormal distention of the bladder as a result of an obstructed outlet due to stricture of the urethra or an adenomatous prostate often requires consideration of the smooth muscle involved. Because prostatic tubules invade the internal smooth muscle layer of the urethra, unusual enlargement of the prostate impedes the sphincter-like action of this muscle. Micturition, with inflammation of the bladder and attending atonicity, is more frequent and in cases of long duration (e.g. tuberculosis) contracture of the bladder approaches a permanent state. The clinical importance of the smooth musculature in the urinary tract cannot be overemphasized.

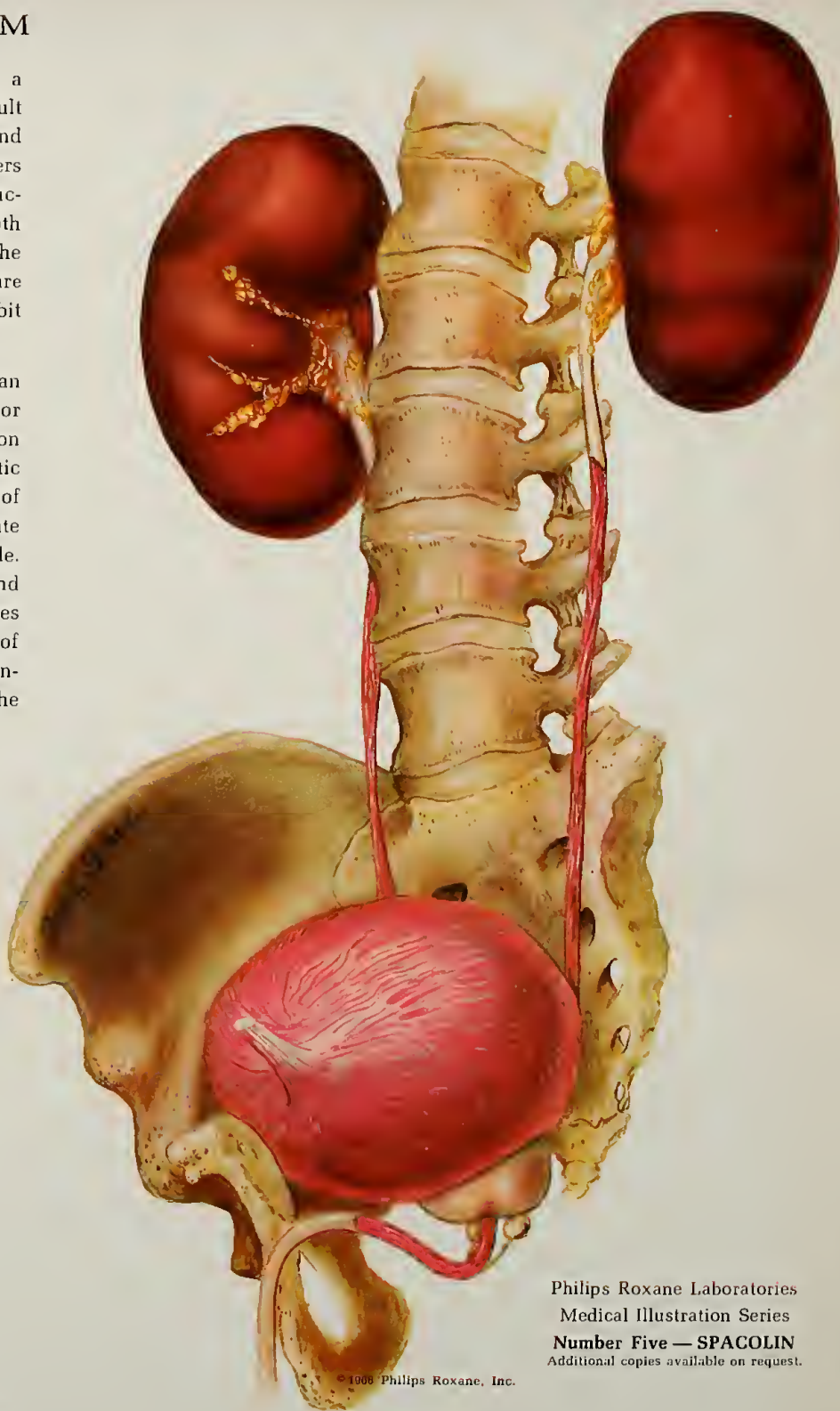
SMOOTH MUSCULATURE OF THE URINARY TRACT



Artist's rendering of the urinary bladder illustrating the trigone, circular, and longitudinal layers of smooth muscle. Note the spray of fibers which passes from the trigone to the wall of the urethra.

The ureters are composed of three layers of smooth muscle, an inner longitudinal layer, a middle circular layer, and an outer longitudinal layer which course the entire length from the renal pelvis to the wall of the bladder where the ureters open as slit-like apertures for the most part retaining their own musculature. They are fairly uniform in size except for three slightly constricted portions, one at the ureteropelvic junction, the second at the pelvic brim, and the third at the extreme lower end of the ureter as it passes through the bladder wall.

The smooth musculature of the bladder is constituted in three general layers with poorly defined boundaries. The outer layer is composed mainly of longitudinal fibers which extend to the neck of the bladder where certain bundles unite to form a loop around the anterior surface of the vesical orifice. Within this loop, the circular layer forms a wedge below the outlet and flows down the urethra in an oblique direction surrounding the canal as a thin layer which, when stimulated, provides an upward pull on the urethral canal. The upward pull of this loop combined with the downward pull of the longitudinal



Philips Roxane Laboratories
Medical Illustration Series
Number Five — SPACOLIN
Additional copies available on request.

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layer gives a sphincter-like action to the musculature at the bladder neck although no true sphincter is present. The musculature of the trigone arises from the longitudinal muscle fibers of each ureter and spreads over the muscles of the bladder wall.

The male urethra is for the most part mucous membrane which contains loosely arranged longitudinal and circular smooth muscle layers. In the prostatic part at the neck of the bladder, the circular layer is highly developed and acts in harmony with the descending array of circular fibers of the bladder contributing to the sphincter-like control of the neck.

Spacolin (Alverine citrate) is a musculotropic antispasmodic which acts directly on the smooth muscle of the genitourinary tract with rapid onset and long duration. Because the parasympathetic nervous system is avoided, anticholinergic side effects do not occur. Moreover, Spacolin, (Alverine citrate) is ideally suited for relief of smooth muscle spasm in the presence of prostatic hypertrophy.

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Spacolin (Alverine citrate)



- A potent musculotropic counter-spasmodic.
- Little or no effect on normal muscle tonicity and motility.
- Spasmolytic effect is 2½ to 3 times stronger than papaverine.
- Unrelated to atropine or atropine-like drugs.
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Each tablet contains: Alverine citrate.....120 mg.

INDICATIONS: Smooth muscle spasmolytic for use in spastic colon, spastic conditions of the gastrointestinal tract, biliary dyskinesia, cholecystitis, spasm associated with peptic ulcer,* achalasia, pylorospasm, spasm attendant to diarrhea, spastic conditions of the genitourinary tract attributable to inflammation and calculi, certain primary dysmenorrheas and as an aid in cystoscopic, esophagogoscopic and gastroscopic examinations.

PRECAUTION: Caution is recommended when using in hypotensive patients.

SIDE EFFECTS: In common with other smooth muscle depressants, Spacolin temporarily lowers blood pressure.

DOSAGE: One tablet after meals 1 to 3 times daily at discretion of physician. When treating spasm associated with peptic ulcer, achalasia or pylorospasm, administer tablets ½ hour before meals. In dysmenorrhea, one tablet 3 times daily starting at onset of discomfort.

SUPPLIED: Bottles of 100 and 500-120 mg. tablets.

*Antacid and dietary measures are of primary importance in ulcer treatment and should not be neglected.



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Measles Remain Serious Health Menace Despite Proven Success Of Rubeola Vaccine

Last year for the first time, because of a new single-shot vaccine, the elimination of one of the most serious epidemic diseases of childhood—common measles—was shown to be practical.

The disease was not wiped out. It is not yet. But in the first six months of 1966, reported measles incidence was down by more than 20 per cent from the same period in 1965, by almost half (48 per cent) from the median incidence for the 1961-65 period.

Since 1963 when the first rubeola vaccine became available, some 12 million children have been vaccinated, mostly since February, 1965. It is a big start. But common measles is still causing epidemics. Furthermore, the dent was the work of dedicated persons in the leadership of medical societies and public health. Cooperation between parents and family physician—a prerequisite for measles eradication—lagged. Evidence of this apathy can be found in the current Public Health Service estimate that more than 12,000,000 susceptible children mostly in lower socio-economic and rural areas remain unprotected, including many of the 4,000,000 children who have reached age 1 in the last year.

But there are grounds for optimism—even as new evidence is being added to the indictment of measles as a very serious disease. (One late finding: traces of measles virus in the brain during—even before—the red-rash phase of the disease, suggesting that encephalitis may be something other than an after effect, lending still more of a sense of urgency to preventive efforts.)

Mass vaccination campaigns when properly organized have been effective. Only in the smallest of the 50 states, however has there been an adequate mobilization to eliminate the threat of a measles epidemic. In Rhode Island, when the State Medical Society got behind a mass vaccination drive, in a single

Sunday last January, in spite of heavy snow, gale winds, and high tides, parents marched 32,000 children—of the total of 52,000 in the state estimated by health authorities to be susceptible—into 3 dozen clinics, mostly in schools, manned by volunteer doctors.

In New York State, other states, and in many large cities, measles vaccine is available at clinics but the techniques of public persuasion have not yet been brought to bear on the problem.

At best it would appear that mass campaigns should be expected to deal only with the backlog of susceptible children. The 4 million who became eligible for vaccination at age one each year are and will be the responsibility of the pediatrician and the general practitioner.

There is need for more such action. There is now experience to guide it.

The Growing Indictment

Quietly, the report in the Jan. 24, 1966, *A. M. A. Journal* began: "New evidence is presented for the first time to uphold the concept that the measles virus is primarily responsible for the signs, symptoms, and pathological changes in measles encephalitis."

Three pediatricians—John M. Adams and Catherine Baird of the UCLA School of Medicine, Leoncio Filloy of Mexico City's Hospital Infantil—had examined the brain tissues of 20 children killed by measles encephalitis, 10 girls, 10 boys, ranging in age from 9 months to 14 years. All showed evidence of direct infection by the measles virus.

They found something else: that while measles encephalitis often begins from the second to fifth day after onset of rash—a fact which had led many physicians to call it "postinfectious encephalitis"—it may actual-

ly precede or occur on the first day of the eruption.

Two of the children—a 9-month boy and 3-year boy—died before appearance of the rash; both had had typical Koplik's spots. One was dead within just an hour, the other within two hours after appearance of neurological signs.

Less than two years before, a *JAMA* editorial on measles encephalitis had noted that the pathogenesis was obscure, the mortality rate high (ranging up to 32 per cent), and "treatment, if for no other reason than it must be given too late, is not very effective. In the light of our present knowledge, the most effective attack against the disease is prevention."

In January, 1966, too, *World Wide Abstracts of General Medicine* carried a report from University of Berlin investigators warning that brain abnormalities during common measles, so mild they may not be recognized, may nevertheless be capable of developing into overt encephalitis.

The German physicians made EEG's for 70 children in the rash stage of the disease. None had overt signs of cerebral disturbance. But abnormal brain wave tracings were found in 45. Follow-up EEG's showed abnormalities still present in 12 at the end of one week, in 3 at the end of 7 weeks (with 2 changing from originally "moderate" to "severe"). One child still showed abnormality after 9 months. Three of these children also developed middle-ear infections and 4 pneumonia.

These were two of the most recent findings to be added to a list of disturbing ones coming from investigations, mainly in the last half dozen years, showing that measles can be far more serious, and in far more ways, than ever before supposed.

In brief:

- (1) If unprotected, at least 90 per cent of children get measles.
- (2) In 1 of every 1,100 reported cases, the disease ends fatally.
- (3) In 1 of every 15, there are immediate,

often serious complications ranging from middle-ear infection to bronchitis, croup, pneumonia.

- (4) In almost 1 of every 2, health is below par for as long as 12 months after the measles: more than the normal amount of school days missed; 4 times as much medical care needed.
- (5) In addition to overt encephalitis (estimates of incidence: 1 in 400 to 1 in 1,000), there is a high rate of subtle brain involvement. That EEG abnormalities occur in 51 per cent of measles patients without clinical signs of encephalitis, with patterns soon reverting to normal but not without possible lasting damage, had first been reported in 1959 by Dr. F. A. Gibbs and University of Illinois coworkers. The latest German report adds to the evidence.

At the October, 1964, American Academy of Pediatrics meeting, Dr. Morten Andelman of the Chicago Board of Health had noted the "growing evidence that this disease, even in mild form, may play a significant role as a cause of mental retardation, learning difficulties, and personality or behavior changes."

Meanwhile, still other studies—here and abroad, some of them supported by the U. S. Public Health Service—as yet in early stages, are suggesting that measles may have still other repercussions:

Childhood measles may lead to pulmonary emphysema.

Measles may pave the way for paralytic polio.

One other threat—to adults—has lately come in for attention. Because it is one of the most contagious diseases known, measles attacks most of the population in childhood. But, according to the Illinois State Medical Society, 10 million American adults have not had measles and have no resistance to it should an epidemic arise. "When measles strikes adults, it can really strike hard," warns the Illinois Society.

When it strikes a woman during pregnancy,

it may affect the outcome, threaten the life of the fetus, reports Dr. Stewart A. Fish of the University of Arkansas School of Medicine, who studied 18 expectant mothers with common measles—not German measles—and found that pregnancies in all of 7 with severe cases ended in abortion, anomalies, or premature delivery.

In June, 1966, the National Association for Retarded Children launched an all out, nationwide campaign against common measles and the mental retardation it causes.

Eradication, a Piecemeal Job

So long as men, and their wives and progeny, move about and so long as common measles exists anywhere in the world, the disease will remain a threat to the unvaccinated. The solution to this quandary is to vaccinate all the susceptible.

This is where the individual family physician and/or pediatrician must take the initiative in preventive medicine. It is a role to which the physician is accustomed and of whose importance he is well aware. Inoculation of infants and children against a growing catalog of diseases is routine in the United States. It remains merely for measles vaccination to be added to the "must list."

Dr. Saul Krugman, professor and chairman of the department of pediatrics, New York University School of Medicine, published a year ago his recommended schedule of immunization for preschool children. It called for DTP (diphtheria, tetanus, pertussis) shots at 2 months with boosters at 3 months, 4 months, 15 months, and between 4 and 6 years (preschool); oral polio vaccine, type 1 or triple at 2 months, type 3 or triple at 4 months, type 2 or triple at 6 months, triple at 15 months and 4 to 6 years (preschool); live attenuated measles-virus vaccine at 9 to 12 months.

"During the past 25 years," Dr. Krugman comments, "the annual number of reported cases of preventable diseases in the United

States has decreased as follows: diphtheria, from 18,675 to 300; tetanus, from 600 to 267; pertussis, from 191,000 to 14,800; smallpox, from 865 to 0; and poliomyelitis, from 42,000 to 94."

The path ahead is clear, and the eradication of measles as a disease of individuals is foreseeable. Concentrated immunization in lower socioeconomic and rural areas can provide the so-called "herd" immunity necessary to control epidemics, possibly by 1967, according to the Public Health Service.

It will begin with a new regimen of preventive medicine for the individual child. It will end with measurable improvement of physical and mental health for all as a consequence of eradication of that dread disease, common measles. This disease, which has a greater morbidity and mortality than polio ever did, is needlessly threatening the health of thousands of children. It can be made as uncommon as smallpox is today.

Mushrooms and Alcohol Don't Mix

Four patients, two adult men and two adult women, became ill after drinking one bottle of beer apiece. But the night before they had eaten "inky caps" (*Coprinus atramentarius*) for dinner. This black-spored mushroom causes an unusual and seldom reported toxic reaction, reports Drs. W. A. Reynolds and F. H. Lowe of Missoula, Mont. It is not poisonous when cooked and eaten and has no toxic effects unless combined with ingestion of alcohol. In some cases, alcohol may be drunk safely immediately after mushrooms are eaten, but a reaction will occur if a drink is taken 24 hours later. In other cases, alcohol drunk before or immediately after eating "inky caps" will produce a toxic reaction. Symptoms, including flushing, rapid heart beat, nausea, sometimes vomiting and collapse, usually occur within two hours, and are transient.—*New England Jour. Med.*, Mar. 25, pp. 630-631.



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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

December, 1966

No. 6

Prophylactic Control of Angina Pectoris Double-Blind Study of Prolonged Release Nitroglycerin

By

Jerre R. White, M. D.

Tuscaloosa, Alabama

The first classical description of angina pectoris, based on a study of 20 cases, was penned in 1768 by William Heberden (1710-1801), a Cambridge graduate and one of the greatest scholars of his time.¹ He wrote:

"They who are afflicted with it are seized while they are walking (more especially if it be uphill, and soon after eating), with a painful and most disagreeable sensation in the breast, which seems as if it would extinguish life, if it were to increase or continue; but the moment they stand still, all this uneasiness vanishes."

Nitroglycerin, still universally recognized as the most effective drug for the treatment of angina pectoris, was introduced by Murrell in 1879.² The eminent cardiologist, Friedberg, in 1963 stated that "*nitroglycerin* is the drug of choice" in angina pectoris.³

Present Status of Nitroglycerin

Two types of vasodilator drugs including nitroglycerin are generally employed in the treatment of angina pectoris:

1. Antianginal agents which act rapidly, such as sublingual nitroglycerin and inhaled amyl nitrite, are preferred for *immediate relief* of paroxysmal attacks. Nitroglycerin, the prototype of this group, usually terminates the seizure in one to three minutes.⁴ In a recent study 82 per cent of a group of patients with coronary disease obtained prompt relief of anginal pain with this drug.⁵
2. Drugs with a slower onset and longer duration of action are needed for *prevention* of attacks of acute pain.⁴

Pharmacologically nitroglycerin and its related coronary vasodilators are believed to

act partly by lessening the work of the heart or decreasing the oxygen requirement of the myocardium. Many clinical trials have indicated that administration of long-acting coronary vasodilators results in reduced severity and frequency of anginal attacks and the need for sublingual nitroglycerin.⁶

For almost a century nitroglycerin has remained as the only undisputed antianginal agent and has served as a standard of comparison for all other drugs recommended for the treatment of angina pectoris. In a recent double-blind trial of its efficacy, nitroglycerin unequivocally demonstrated increased work performance by the Master two-step staircase test correlated with favorable electrocardiographic response.⁷

There is no substitute for sublingual nitroglycerin in the emergency treatment of acute seizures of anginal pain. However, for the purpose of prolonged prophylactic control to prevent or minimize attacks, sublingual administration has three definite disadvantages:

1. Short duration of effect, only twenty minutes.⁸
2. The side effects, mainly flushing and headache, are common and sometimes severe. In the case of oral administration, safety is enhanced. Cases of extreme tolerance have been reported in which almost 0.5 Gm. has been taken orally without ill effects.⁹
3. The fear of a sudden attack associated with the warning to take a sublingual tablet whenever needed introduces an emotional hazard. In a study of 200 cases of coronary disease, emotion was the precipitating factor of chest pain in 47 per cent.⁵

Prophylactic Use of Nitroglycerin

When he introduced the drug in 1879, Murrell also emphasized its prophylactic use. When attacks of anginal pain were induced by unavoidable activities known to the patient beforehand, he advised placing a tablet under the tongue a few minutes before start-

ing the exercise.² Because of the unpredictability of this procedure, it is preferable to use a medication of slower and more prolonged action.

With medications presently available for sustained release of the active coronary vasodilator, it is possible to prevent or mitigate daytime attacks due to accustomed exercise and also nighttime seizures caused by anxiety or bad dreams.

It was for this purpose that I set up a double-blind clinical trial of a sustained release nitroglycerin capsule (2.5 mg.) which maintains effectiveness for a twelve-hour period and thereby provides around-the-clock protection with two daily doses.* Undoubtedly a certain amount of nitroglycerin is impaired by the gastrointestinal secretions and some is destroyed in the liver when the unprotected medication is taken orally. However, the unique pellets which carry the nitroglycerin in the sustained release form act as miniature dialysis cells with a subsequent perfusion of the active drug that tends to decrease the variables of digestive activity. The positive clinical results in the present study help to confirm this hypothesis.

Procedural Outline

Sixty-eight patients with known angina pectoris were chosen for this study. With reference to age, two patients were in the fourth decade, 11 in the fifth, 14 in the sixth, 26 in the seventh, and 15 in the eighth. Racially, 65 of the subjects were white and three negro.

All 68 patients had been under observation for from one to four years and many had electrocardiographic evidence of myocardial ischemia prior to their assignment to the present study. Most of them had previously been treated with dipyridamole or pentaery-

*Supplied as NITRO-BID™ Plateau CAPsules®, containing 2.5 mg. of nitroglycerin in sustained release form, by Marion Laboratories, Inc., Kansas City, Missouri.

thritol tetranitrate, some in conjunction with phenobarbital. In the few cases where anti-coagulant therapy was used, it was continued throughout the study. All patients were instructed to discontinue other previous medications and there was an interval of at least five days before the clinical trial was begun.

The medication and placebo capsules were coded, so that neither patient nor doctor knew their identity. The groups were assigned to one or the other coded capsule at random. After the code was broken, the subjects were found to be divided into two age-range groups as shown in table 1.

TABLE 1
Age Range of Two Groups

Age	Active Drug	Placebo
70-79	7 (1) *	7
60-69	14	12
50-59	6 (1) *	7
40-49	6	5
30-39	0	2
TOTAL	33 (2) *	33

*Denotes dropouts from study.

The dosage was one capsule every 12 hours. All patients constantly carried a small supply of nitroglycerin gr. 11 200 mcg. sublingual tablets for immediate use in the event of a sudden attack of anginal pain. Each patient was advised to report to me immediately in the event of severe pain not relieved by the sublingual tablets; or any development of unusual symptoms.

The treatment with either medication or placebo was continued for a period of 25 days, after which the identity of the capsules was decoded.

Later some of the patients in the active medication group were treated for two and a half additional months with sustained action nitroglycerin. It is interesting to note that some of these who had good results during

the initial weeks of treatment subsequently found the medication less effective with continued use. In five such cases the treatment was interrupted for an interval of five days. When it was resumed for a period of 25 days, the response was excellent. Possibly the long continued use of nitroglycerin orally produces a tolerance to the drug which is corrected by suspending it for a period of approximately five days to a week.

Dropouts

There were two dropouts, both in the active medication group. One patient discontinued therapy after five days because of dizziness; the other, because of a sensation of pinpricks over his entire chest wall.

The entire program was completed by 66 patients, 33 in each group. The evaluation is based on a comparison of the results in these two groups.

Results

The result in each case was recorded as excellent, good, fair or poor on the basis of the following criteria: (1) reduction of the severity and frequency of episodes of anginal pain, (2) ability to increase accustomed exercise without chest discomfort, and (3) reduction in the number of sublingual nitroglycerin tablets required as compared with the pretreatment quota.

As shown in table 2, seven of the 33 pa-

TABLE 2
Results of Therapy in Two Groups

Result	Active Drug	Placebo
Excellent	7 (21%)	2 (6%)
Good	24 (73%)	3 (9%)
Fair	2 (6%)	6 (18%)
Poor	0 (—)	21 (67%)
TOTAL	33 (100%)	33 (100%)

tients (21 per cent) had excellent results as compared with two (6 per cent) in the placebo group. Twenty-four or 73 per cent had good in the active group as opposed to three (9 per cent) in the placebo group. Two (6 per cent) had fair results and none poor results as compared with six (18 per cent) and 21 (68 per cent), respectively, in the placebo group. There were no deaths in either group.

The positive response to the placebo in 11 cases (33 per cent) was undoubtedly due to psychological suggestion⁷ plus the beneficial effect of the physician-patient rapport during the early stage of treatment.¹⁰ Because of these psychological influences, results with the placebo must be discounted against those obtained with the active medication in the evaluation. It is noteworthy that there were no side effects to the placebo in any case.

Side Effects

Side effects occurred in five treated cases (15 per cent); in two, they were severe enough to require discontinuance of therapy.

One patient, a woman aged 84, complained that the medicine made her so dizzy that she was unable to walk. She stopped taking it after five days. The other patient, a negro man aged 52, stated that he felt a sensation of pinpricks over his throat and entire chest wall and consequently took the medication only four days. A follow-up electrocardiogram in this case showed no change from his previous EKG.

There were minimal side effects in three additional cases; namely, mild headache, vertigo, and tingling over the body, each in one case.

Summary

A double-blind study was performed in 68 cases of angina pectoris to determine the prophylactic effectiveness of a sustained release nitroglycerin in comparison with the placebo. The dosage was one capsule containing 2.5 mg. twice daily, before breakfast and at bedtime, continued for a period of 25 days.

The sustained action nitroglycerin capsules proved highly effective in reducing the severity and frequency of the paroxysms, improving the exercise tolerance, and diminishing the need for sublingual tablets. Excellent or good results were obtained in 94 per cent of the treated patients as compared with 15 per cent for the placebo group. None of the treated patients had a poor result as compared with 67 per cent in the placebo group.

Side effects occurred in five cases and were manifested as mild vertigo, tingling or headache. In two cases the medication was discontinued but in the other three the side effects were minimal.

The favorable response to the placebo in some cases is indicative of the psychological effect often observed in angina pectoris.

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"Closed" Heart Surgery In Infants And Children

By

Church E. Murdock, Jr., M. D., FACS; Hollis J. Wiseman, M. D., FAAP;

And Robert O. Harris, III, M. D., FAAP

Mobile, Alabama

This report has two objectives. First, to suggest a persistent failure by physicians to recognize and refer *infants under one year of age for needed cardiac catheterization and possible curative or palliative "closed" heart surgery*. Secondly, experience with 31 cases of "closed" heart surgery in infants and children is presented.

Sixty per cent of neonates with congenital cardiovascular disease die within the first 12 months of life. Seventy-seven per cent of these may be cured or palliated (with hope of future cure) surgically. Properly, we must seek about 70 per cent salvage of these patients as our goal.

In 1962, Cooley et al² reported on 554 cases of congenital cardiovascular disease in infants under one year of age. One hundred fifty-four of these received no diagnostic workup or chance at surgical aid. Nineteen of these revealed, at necropsy, an isolated curable lesion (patent ductus, aortic coarctation, pulmonary valvular stenosis) while 25 might have been highly palliated. Among 400 patients operated there were a number for whom surgery seemed over optimistic. If one confines surgery to the cases with curable lesions or lesions readily palliated with reasonable hope for future cure (Table 1), only 311 operations (not 400) were realistic. By

these revised criteria, 81.5 per cent of infants diagnosed and operated were salvaged.

The patent ductus, a curable lesion, will provide a frame of reference in arguing the first objective. Isolated, this lesion is responsible for about 17 per cent of all congenital heart disease while 2.5 per cent will demand surgery in the first year of life.³ Even so, 25 per cent of Cooley's series (as revised) were cases of isolated patent ductus arteriosus. These accrued at the rate of about nine cases per year in a population area of slightly over one million. This report originates from a patient reservoir of 350,000 (or about $\frac{1}{4}$ as large) and spans the period 1960-65. Theoretically, in five years, this patient reservoir would produce 11 cases of isolated patent ductus, under one year of age, demanding life saving surgery. Five such cases were operated and these constituted 55 per cent of the total under one year of age.

Put another way: 50 per cent of ductus cases were properly cared for (these cases should have constituted 25 per cent of the total rather than 55 per cent) and 10 per cent of other (normally 75 per cent of those in need: anticipated 34 cases: treated four) and varied lesions. Obviously, these figures are hypothetical but strongly suggest an urgent need for an intensified program aimed at in-

TABLE I: Favorable surgical lesions in patients one year of age. If "open" heart surgery recognized as mandatory preoperatively, it is with reluctance that surgery is advised.

Lesion	Procedure: Curative (c) or Palliative (p)
Patent Ductus Arteriosus	Ligation or division and suture (c)
Tetralogy of Fallot*	Systemic to pulmonary artery shunt (p)
Ventricular Septal Defect*	Pulmonary artery banding (p)
Coarctation of Aorta	Resection and anastomosis (c)
Tricuspid Atresia**	Superior vena cava to peripheral right pulmonary artery anastomosis (p)
Anomalous Pulmonary Veins***	Various techniques (p)—May require "open procedure"
Aortic Stenosis***	Transventricular valvotomy (p)—May require "open procedure"
Pulmonary Stenosis	Transventricular or transarterial valvotomy (c a/o p)
Vascular Ring	Division of offending vessels

*Palliation good—outlook for eventual cure good

**Some cases too severe to aid—other—excellent palliation

***Probably ill advised due to mortality and economic burden if "open procedure" required

creasing awareness of the problem and more aggressive utilization of available diagnostic and therapeutic procedures of proven value.

Emphasis is placed on the stated objective: to suggest that there is a problem as proposed in the foregoing.

Clinical Material

Here are excluded "open heart" cases and cases over 15 years of age (Table II). Total experience indicates that all correctable congenital cardiovascular lesions should be detected and corrected by the age of 15 years.^{1,3} In this group, stability of the cardiovascular system is reasonable: vessels are elastic; surgery is easier, safer and more effective.

The pediatricians and the surgeon responsible for the patients reported are conservative in approach. Thus, definitive catheter diagnosis often indicated a rather hopeless situation regarding immediate palliation or long range hope of cure by current techniques. Moreover, definition of the problem often permitted more aggressive medical therapy for the very young permitting growth to bring about a more favorable surgical risk. As a result of this, the patients

operated under one year of age unquestionably demanded surgery.

After one year of age, surgical indications are very liberal for "closed" heart procedures. This is particularly true in cases of ductus² and coarctation¹ where total experience recommends early surgery as safer surgery due to the relatively healthy state of vessels under attack. After one year of age, the presence of an isolated ductus indicates immediate surgery. Coarctation is best operated between five and eight years of age, while other lesions are individualized particularly with reference to "open" heart surgery.

The roentgenograms, fluoroscopy and electrocardiograms in these cases were often helpful, occasionally confusing but almost never conclusive.

Prior to one year of age, no diagnosis was certain without cardiac catheterization.⁴ One moribund patient was not catheterized due to severity of illness; fortuitously, the diagnosis was correct.

After one year of age, cardiac catheterization a/o aortography (diagnostic or corroborative) was required in 36 per cent.

Surgical methods used were standard. Pre-operative attention focused on clearing infection and controlling congestive heart failure. Post-operatively, tracheo-bronchial toilet, high humidity atmosphere, prevention of gastric dilatation, avoidance of over infusion; and, occasionally, antibiotics were the salient features. It was frequently possible to discontinue therapy for congestive failure post-operatively.

Operative Management

Routines have been developed to reduce operative morbidity and this has been effected (Tables III & IV).

Thoracostomy drainage is considered unnecessary as a routine. Specific situations may demand its use: exposed raw surfaces, accidental pulmonary injury, etc.

Complications

Table V is a breakdown of complications. Pneumonia and congestive heart failure do not appear as they were present pre, during and post-operatively when they occurred at all.

The major intra-operative hemorrhage resulted from shearing of the aortic end of the ductus by a defective clamp. Post-operatively, inspection of the clamp revealed a number of serrations slightly bent.

Note that four instances of damage to lymphatics are recorded. These were in coarctation (3) and a Blalock shunt (1). In two instances of coarctation a pseudohyroma was noted overlying the post stenotic aorta. It was necessary to incise this for several inches but a two layer running suture closure was done and thoracostomy omitted unevent-

TABLE II: Clinical material presented and divided according to age. ICHF = Intractable Congestive Heart Failure. *Deaths commented on in text.

Under One Year of Age: 9 Cases: 4 Dead: 56% Salvage

Lesion	No.	Procedure	Indication	Alive	Dead*
Ductus Only	4	Division Ductus	ICHF	4	
Ductus Only	1	Ligature Ductus	ICHF		1
Multiple	1	Division Ductus & Right Subclavian	ICHF		1
Ventricular Defect Only	1	Band Pulmonary Artery	ICHF	1	
Tetralogy of Fallot	1	Blalock Shunt	Severe Hypoxia		1
Multiple	1	Resection Coarctation	ICHF	1	Died 4 mos. post-op

One to Three Years of Age: 11 Cases: 1 Dead: 11% Mortality

Ductus Only	7	Division Ductus	Patent Ductus	7	
Multiple	2	Division Ductus	ICHF	2	
Multiple	1	Division Ductus Band Pulmonary Artery	ICHF: Pulmonary Hypertension		1
Tetralogy of Fallot	1	Blalock Shunt	Progressive Cyanosis	1	

Three to Fourteen Years of Age: 11 Cases: 0 Dead: 0% Mortality

Ductus Only	7	Division Ductus	Patent Ductus	7	
Coarctation Aorta Only	2	Resection: E-E Repair	Diastolic 110+	2	
Tetralogy of Fallot	1	Blalock Shunt	Progressive Cyanosis	1	
Mitral Stenosis	1	Transventricular Commissurotomy	Class IIC	1	
TOTAL CASES	31	MORTALITY—16%		26	5

TABLE III: Incisional preferences. It is felt that these choices are additional aids in reducing morbidity. (Table IV) The pulmonary artery is much easier to band through incision ≈ 1 when the patient can tolerate pleural entry.

*LICS = Left Intercostal Space

Incisions		No.
1	4th LICS:* Entry through periosteal bed intact 5th rib	22
2	4th LICS: Entry-periosteal bed intact 5th rib—Divided Rib 4 & 5	3
3	3rd LICS: Entry-periosteal bed intact 4th rib	3
4	4th LICS: True intercostal incision—anterior	1
5	5th LICS: True intercostal incision—anterio-lateral	1
6	Split Sternum: No pleural entry	1
		<hr/> 31

≈ 1 —Ductus Surgery

≈ 2 —Coarctation Surgery

≈ 3 —Blalock Shunt (Systemic—Pulmonary Shunt—Tetralogy of Fallot)

≈ 4 —Ductus—Moribund

≈ 5 —Mitral Commissurotomy

≈ 6 —Banding of Pulmonary Artery

"To Reduce Morbidity"

TABLE IV: Blood infusion usually unnecessary; vomiting minimal with liquid diet frequently accepted within two hours of closure; discharge often feasible on 5th post-operative day.

- I. To diminish blood loss during thoracotomy:
 - a. Use electrosurgical knife.
 - b. Transperiosteal entry—not intercostal muscles.
- II. To save time:
 - a. Electro coagulation of bleeders.
- III. To identify possible contaminant:
 - a. Culture "ductus" node or adjacent lymph node.
- IV. To secure absolute hemostasis:
 - a. Pack surgicel on raw surfaces: five minutes: flush off.
- V. To obviate pleural reaction:
 - a. Wet exposed tissue frequently, with saline.
 - b. Close pleura over operative field.
 - c. Avoid opening pericardium where possible.
- VI. To prevent atelectasis:
 - a. Inflate lung frequently during surgery.
 - b. Decompress stomach on closing.
 - c. Expand lung fully on closing; no thoracostomy (less pain).
- VII. To diminish wound complications:
 - a. Drain subscapular space when invaded.
 - b. Close skin with subcuticular suture.
- VIII. To be sure:
 - a. Examine portable chest film before removal from O. R.
- IX. To prevent overinfusion:
 - a. Discontinue infusion line on arrival in recovery room.

Intra-Operative Complications

TABLE V: It is apparent that intra-operative cardiac arrest is more readily dealt with than post-operative arrest. (Table VI)

	Complication	Management	Result
M	Hemorrhage (1)	Control—blood infused	Recovery (1)
A	Cardiac Arrest (3)	Resuscitative effort	Recovery (2)
J			Expired (1)*
O			
R	Ventricular Fibrillation (1)	Manual cardiac assist	Recovery (1)
M	Lymphatic Injury (4)	Ligature and suture	Recovery (4)
I	Damage to sympathetics (1)	None	Persists
N			
O			
R			

Intra-operative Major: 5	Recovered 4	Dead 1
Intra-operative Minor: 5	Recovered 4	Persists 1

fully. In a third instance, the thoracic duct was damaged, sutured and thoracostomy employed. Thirty-six hours after removal of the thoracostomy tube, chylothorax was noted but drained spontaneously through the drainage site: regression was rapid and complete. In the fourth, the thoracic duct was damaged, ligated and thoracostomy omitted uneventfully.

Mortality

Five deaths occurred (Table II). Four were under one year of age and one was 15 months of age. Four were immediate and one late (four months post-operatively). To brighten this dismal picture, one should note: there were no deaths in 21 elective operations and only one death in an isolated lesion. A brief summary of each death follows:

- I. Premature—Age four days, weight 4 lbs. 7 oz., severe congestive heart failure, rapidly deteriorating in pulmonary edema. Anterior incision, single ligature ductus, cardiac arrest successfully overcome. Total operating time, 20 minutes. Expired 36 hours post-operative in progressive pulmonary edema.
Comment: Prognosis hopeless

- II. Premature—Age six weeks, weight 5 lbs. 9 oz., with progressing intractable congestive heart failure and respiratory difficulty. Catheter diagnoses: Patent ductus, coarctation of aorta, anomalous right subclavian artery, *entire left caval system* draining via coronary sinus into right atrium. Operation: division and suture ductus, interruption anomalous subclavian. Intraoperative cardiac arrest X 2. Resuscitation yielded no response after second arrest.

Comment: This experience was instructive.

- III. Age 11 months with pseudotruncus type Tetralogy of Fallot. Arterial oxygen saturation 25 per cent. Oxygen essential to feeding two months. Almost continuous existence in oxygen tent for three weeks despite which sitting was impossible and feeding difficult. Blalock shunt accomplished. Hypoxic cardiac arrest in recovery room post-operatively.
Comment: Prognosis hopeless.

- IV. Age three months, weight 8 lbs. 11 oz., in intractable and progressive congestive heart failure. Catheter diagnoses: Patent ductus, aortic coarctation, ventricular

Post-Operative Complications

TABLE VI: Post-operative cardiac arrest is a manifestation of the severity of the patient's disease and if good surgical correction is not possible, death will ensue.

	Complication	Management	Result
M A J O R	Cardiac Arrest (2)	Resuscitation	Expired (2)
	Atelectasis (2)	Suction—cough	Recovery (2)
M I N O R	Wound Infection (2)	Drainage	Recovery (2)
	Chylothorax (1)	None	Recovery (1)
	Pericarditis (1)	None	Recovery (1)
	Impetigo (1)	Antibiotics	Recovery (1)
	G. U. Monilia (1)	Stop antibiotics	Recovery (1)
	Post-operative Major: 2	Recovered 0 Dead 2	
	Post-operative Minor: 8	Recovered 8 Dead 0	

septal defect. Procedure: Resection of coarctation (incidentally resecting ductus) with end to end anastomosis. Initial response excellent. Deteriorated and died four months later in congestive heart failure.

Comment: Pulmonary artery banding at the time of surgery might have salvaged this infant.

- V. Age 15 months, weight 24 lbs., in progressive, intractable congestive heart failure. Catheter diagnoses: Patent ductus, ventricular septal defect and pulmonary hypertension. (Pulmonary pressure greater than systemic) Procedure: Division and suture of ductus with banding of pulmonary artery. Cardiac arrest within minutes of closure.

Comment: Surgical risk was recognized as extreme. Non-operative management was failing rapidly. There was a fall in systemic arterial pressure on clamping the ductus. The decision was made to proceed with division of the ductus and banding of the pulmonary artery. No

significant pulmonary gradient could be produced and banding was definitely compromised. It is believed that the patient was beyond salvage. This possibility was recognized at the time of surgical decision.

Fate of Survivors

- I. Age 30 months on digitalis but not doing well. Catheter diagnoses: Patent ductus and ventricular septal defect. Response to division and suture of ductus only fair. Some months later, "open" heart correction of the ventricular defect led to an excellent final result.
- II. Age 11 months, weight 8 lbs. Five bouts of staphylococcal pneumonia and inexorable congestive heart failure. Catheter diagnoses: Large ventricular septal defect with pulmonary hypertension. Operation performed as a desperation measure in the presence of pneumonia and heart failure. Procedure: Thru sternum splitting incision, pulmonary artery band-

ing. Presently, 14 months later, is gaining weight.

Comment: "Open" heart surgery mandatory in time.

III. Age 36 months at the time of division of ductus. Persistent right ventricular hypertrophy and murmur indicated recatheterization. A peripheral pulmonary artery coarctation persists but does not demand surgery at this time.⁵

IV. Age 14 years. Rheumatic heart disease with mitral stenosis Class IIC*. Transventricular dilatation of mitral valve to 3.5 cm. with Cooley dilator. Intra-operative ventricular fibrillation reverted with little assistance. Five years later, the patient continues antibiotic prophylaxis but has no physical limitation and does not require digitalis.

Others are cured or effectively palliated. The cases of Tetralogy (Blalock operation) and large ventricular septal defect (pulmonary artery banding) require additional surgery.

An unexplained systolic murmur persists in two isolated patent ductus cases. One pulmonary artery coarctation is suspected but clinical stability indicates expectancy.

*American Heart Association Classification.

Summary and Conclusion

It is suggested that the standardized skills and procedures of "closed" heart surgery are not adequately utilized at present. If true, this means that many infants die needlessly each year.

It is feared that only 20 to 30 per cent of candidates are referred for diagnosis and possible surgery; this from a population reservoir of about 350,000.

A clinical experience with 31 infants and children subjected to "closed" heart surgery is presented.

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CORRECTION

A typographical error appeared in the November issue of the Journal in an article entitled "Management of Rh Problem," written by George Cassady, M. D. On page 560, paragraph four, the statement is made that "200 mg. of protamine sulfate are given via the umbilical catheter." The correct figure is **20 mg.** of protamine sulfate. This correction is made in order to draw attention to the typographical error.

APPENDICITIS POSES SERIOUS THREAT TO ELDERLY

For those over 60, acute appendicitis can be a special threat.

An elderly person's diseased appendix tends to perforate easily, often leading to serious complications from infection. Elderly death rates are much higher than average for appendicitis, otherwise considered a routine ailment.

Prompt exploratory surgery is the best way to counteract this threat, says an article in the September 5 Journal of the American Medical Association. For a variety of reasons, many elderly appendicitis victims are not operated upon soon enough, the authors say.

Twenty-eight consecutive cases of acute appendicitis in patients aged 60 to 91 were reviewed by the authors, two physicians at Peter Bent Brigham Hospital and the Veterans Administration Hospital, West Roxbury, Mass.

They found the appendix had perforated in 17 of 21 patients operated upon more than 24 hours after the first symptoms of illness. Only one of six patients suffered a ruptured appendix when operated upon less than 24 hours after the onset of symptoms.

A striking reduction in the death rate was noted (2 of 28 patients, or 7 per cent), compared to a 28 per cent death rate among elderly appendicitis victims studied 30 years earlier at Peter Bent Brigham Hospital.

Part of the reduction is apparently due to antibiotics now available, and partly due to improved patient care, the authors said. Thirty years ago, there was a "remarkably high" rate of appendix perforation (82 per cent in the study cited.) This was most likely due to delaying of surgery, the authors said.

The classical symptoms of appendicitis, such as nausea, vomiting, and a steady pain in the lower right section of the abdomen, were present in more than half of the elderly pa-

tients in the current study. Details of medical treatment are about the same as those for younger people, the report said.

Older people sometimes put off seeking treatment, the authors pointed out. Many live alone, removed from friends and relatives who might otherwise urge them to seek medical advice. Still others have fixed ideas about the diagnosis of their illness, and even about the proper way to treat it.

All these things add to the hazards of appendicitis when it strikes the elderly.

Physicians can reduce illness and death by remaining alert for appendicitis symptoms, and "by recommending urgent surgical exploration when appendicitis is first suspected," the report said.

The authors are Arnold G. Coran, M. D., and H. Brownell Wheeler, M. D.



OPPORTUNITY

For doctors who want to join a multi-specialty group . . . who want to practice in Florida. A senior surgeon with a large practice and with adequate facilities (including laboratory, x-ray and physical therapy departments) desires to confer with board eligible or board certified doctors. The intent is to form a new multi-specialty group practice. Close proximity to a new 500 bed hospital. All inquiries held in strict confidence. Reply to: Jay S. Lombardy & Associates, Management to the Medical Profession, 1177 N. E. 8th. Street, Delray Beach, Florida.



"'Tranquilizer' is not a good word"¹

THIS classification is psychologically too seductive, pharmacologically too unspecific, and in terms of results not infrequently untrue."²

What is a tranquilizer? According to the 24th Edition of Dorland's Medical Dictionary³ a tranquilizer is "an agent which acts on the emotional state, quieting or calming the patient without affecting clarity of consciousness."

Defining a drug by its effects, however, can be misleading. The same effects by which the dictionary defines a tranquilizer have sometimes been seen after administration of a sedative — or, for that matter, a placebo.

Ambiguous though the term may be, it appears to be here to stay. The 1966 edition of the Physicians' Desk Reference⁴ lists 42 tranquilizers indicated for treatment of anxiety and apprehensive states.

'Tranquilizers' have differences in action, differences in effect

Although all tranquilizers are intended to calm anxious patients there are differences in their actions — and in their effects. They have been divided into three categories — the rauwolfia group, the 'minor' tranquilizers, and the phenothiazines.⁵

Although the tranquilizing effect of rauwolfia has been known for centuries, its use as an antipsychotic agent in current practice has diminished.⁵

A 'minor' tranquilizer is often prescribed to achieve more than one effect. Thus, besides being tranquilizers some of these compounds may be muscle relaxants, antihistaminics with some calming action, anticholinergic sedatives, or antispasmodics.⁵

The phenothiazines are considered 'major' tranquilizers because they alter psychotic behavior.¹ This classification may have done them more harm than good because it implies that the phenothiazines should be reserved for the more

severely disturbed. This is not necessarily true.

The phenothiazines — and the problem of sedation

One of the problems of prescribing phenothiazines for ambulatory patients has been the fear that excessive sedation will impair the patient's ability to function. This, however, is less of a problem with some of the phenothiazines.

"Clinically they may be differentiated primarily in terms of their potency and the extent of their sedative effect, which appear to be inversely proportional. That is, the least potent, the one which is used in highest dosage, chlorpromazine, is the most sedative, while the reverse holds true for fluphenazine."⁶

In a recent report on various studies conducted over several years evaluating 360 patients treated for anxiety and stress with seven phenothiazines, this inverse relationship of potency to sedation was confirmed.⁷ Also under consideration was the degree to which the particular phenothiazines neutralized anxiety (the angolytic index). Interestingly enough there was, again, an inverse relationship. The most sedative of the phenothiazines appeared to be the least active in neutralizing anxiety. Flu-

phenazine, one of the least sedative, on the other hand, was found to be most effective in relieving anxiety.⁷

RELATIVE SEDATIVE AND ANGOLYTIC INDICES OF PRINCIPAL PHENOTHIAZINES*

DRUG	SEDATIVE INDEX	ANGOLYTIC INDEX	BASED ON STANDARD DOSE OF
Chlorpromazine	100	15	25 mgs.
Trifluoperazine	100	15	25 mgs.
Thioridazine	90	17	25 mgs.
Perphenazine	15	25	4 mgs.
Carphenazine	25	25	25 mgs.
Trifluoperazine	3.3	95	2.0 mgs.
Fluphenazine	3.5	100	2.5 mgs.

*adapted from Sainz⁷

Prolixin is therapeutically effective without excessive sedation

When used as a 'tranquilizer' in general medical practice, in many patients Prolixin (Squibb Fluphenazine Hydrochloride) suppresses anxiety, but not normal activity. These two features are of particular importance to patients who must be able to live and work without their normal daily activities being restricted.

Because of its longer duration of action, Prolixin, in doses of as little as one to three milligrams in adults, generally taken once a day, is effective in maintaining many patients free of their symptoms of anxiety and tension.

Contraindications: Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use with caution in patients with a history of convulsive disorders. Severe reactions may occur in patients with idiosyncrasy to other centrally-acting drugs, and severe hypotension may occur in patients with special medical disorders, e.g. mitral insufficiency and pheochromocytoma.

Precautions: Effects of atropine, anesthetics and C.N.S. depressants may be potentiated. Hypotension may occur in patients undergoing surgery. Do not use epinephrine for treatment of the hypotensive reactions which may appear in patients on phenothiazine therapy.

Side Effects: Extrapyramidal reactions, allergic skin reactions, the possibility of anaphylaxis, drowsiness, visual blurring, dizziness, insomnia, nausea, anorexia, salivation, edema, perspiration, dry

mouth, abnormal lactation, polyuria, hypotension, and jaundice and biliary stasis may occur. Routine blood counts are recommended to determine possible blood dyscrasias; if symptoms of upper respiratory infection occur, discontinue drug and institute appropriate therapy.

Available: 1 mg. tablets. Bottles of 50 and 500.

For full prescribing information, see package insert.

References: 1. Simpson, G.M.: Postgrad. Med. 39:557, 1966. 2. Freyhan, F.A.: Am. J. Psychiat. 115:577, 1959. 3. Dorland's Illustrated Medical Dictionary, ed. 24, Philadelphia, W. B. Saunders Co., 1965, p. 1603. 4. Physicians' Desk Reference, 1966, Oradell, N.J., 1965, p. 310. 5. Cohen, S.: Northwest Med.: 65:197, 1966. 6. Detre, T., and Jarecki, H.: Connecticut Med. 25:553, 1961. 7. Sainz, A.: Psychosomatics 5:167, 1964.

PROLIXIN[®]
SQUIBB FLUPHENAZINE HYDROCHLORIDE



'The Priceless Ingredient' of every product is the honor and integrity of its maker.

block end runs



LOMOTIL

tablets/liquid

® Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride 2.5 mg.
(Warning: May be habit forming)
atropine sulfate 0.025 mg.

tackles the problem of diarrhea directly

Effectiveness—Physiologic evidence indicates that Lomotil acts directly on the smooth muscle of the bowel to lower motility and control diarrhea. This action is unsurpassed in promptness and efficiency.

Convenience—Lomotil is available as small, easily carried, virtually tasteless tablets and as a pleasant, fruit-flavored liquid.







Versatility—The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or adjunctively in diarrhea associated with:

- Functional hypermotility • Acute infections • Malabsorption syndrome • Drug therapy • Gastroenteritis and colitis • Irritable bowel
- Regional enteritis • Ileostomy • Ulcerative colitis • Food poisoning

*For correct therapeutic effect
Rx correct therapeutic dosage*

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage

3-6 mo. . . ½ tsp. t.i.d. (3 mg.) 
6-12 mo. . ½ tsp. q.i.d. (4 mg.) 
1-2 yr. . . ½ tsp. 5 times daily (5 mg.) 
2-5 yr. . . 1 tsp. t.i.d. (6 mg.) 
5-8 yr. . . 1 tsp. q.i.d. (8 mg.) 
8-12 yr. . 1 tsp. 5 times daily (10 mg.) 

Adults: 2 tsp. 5 times daily (20 mg.) 
(or 2 tablets q.i.d.)

*Based on 4 cc. per teaspoonful.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

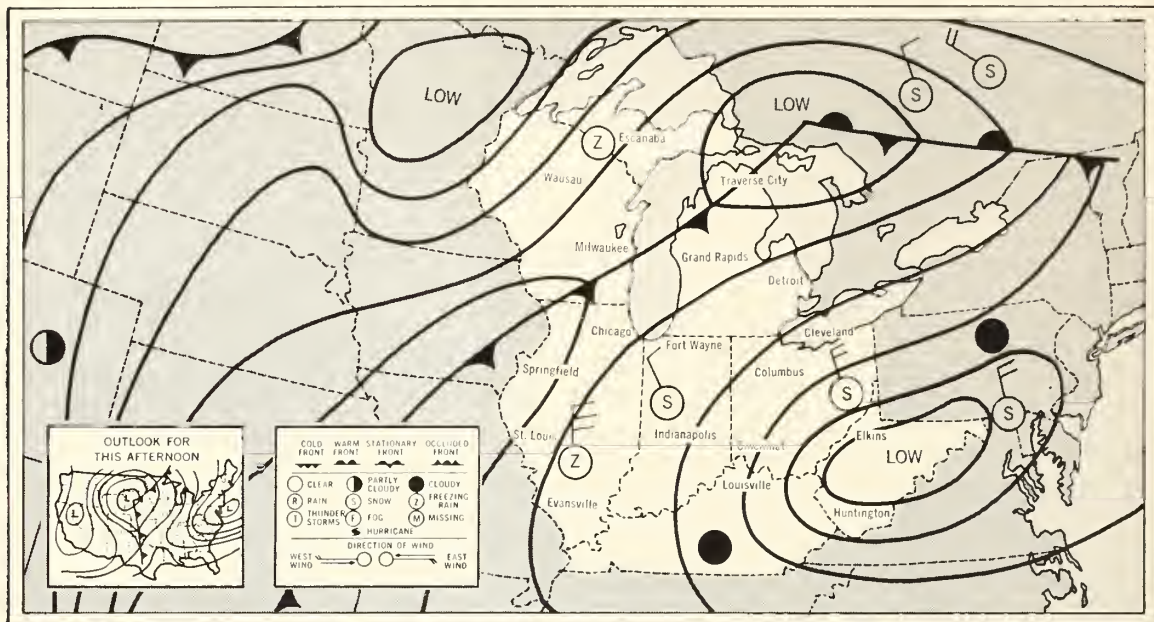
Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

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Tussagesic®

timed-release tablet contains:

Triaminic®	50 mg.
(phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. **Side effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

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CALIFORNIA STUDY PROVIDES NEW SMOKING-CANCER LINK

California men—members of a religious group which frowns on smoking—had a much lower-than-average death rate during a recent four-year period.

Seventh-Day Adventist men in California had particularly low rates of respiratory disease—only one-fourth the statewide average—says a report in the October 10 *Journal of the American Medical Association*.

Findings of the four-year study “support the causal relationship of cigarette smoking to lung cancer,” but discount the theory that a person’s physical constitution is a major factor in whether he gets lung cancer, said a summary of the *Journal* article.

The 11,071 Seventh-Day Adventist (SDA) men studied were similar to other California men, except that they had above-average incomes, were older than the average Californian, had much less exposure to tobacco—and had only half the expected death rate from all causes, including respiratory disease.

Between 1958 and 1962, 850 of these 11,000 men died, but only 28 deaths were due to lung cancer or emphysema. (About 12 per cent of all male deaths in California are now due to respiratory illness, including malignancy.)

There was further “striking evidence” concerning these 28 deaths, the investigators said. Seventh-Day Adventists believe in abstaining from tobacco, and hold that continued tobacco use constitutes grounds for expulsion from the organization. Of the 28 men who died of lung cancer and emphysema, only one had been a lifelong SDA. The other 27 had long histories of smoking, and most were recent converts to the religious group. Among 3,913 lifelong SDA members who presumably had done little or no smoking, there was only one death from respiratory illness.

Authors of the report are Frank R. Lemon,

M. D., and Richard T. Walden, M. D., of the Department of Preventive Medicine, School of Medicine, Loma Linda University, Loma Linda, Calif.

There are some classes of disease in which SDA death rates are close to those of their fellow Californians. These include cancers of the liver, brain and nervous system, endocrine glands, leukemias and lymphomas, miscellaneous abdominal cancers, and asthma, diabetes, and hypertensive heart disease.

However, only half as many Seventh-Day Adventist men as might be expected died during the four years of the investigation. An additional 398 deaths would have been expected among a similar group of men from the general California population.

Although the SDA men were proportionately older than the general population of California men, only eight per cent of SDA male deaths were due to cancers of the lung, esophagus, larynx and mouth, compared to 32 per cent for the general population.

Where tuberculosis, influenza pneumonia, and emphysema accounted for six per cent of all deaths of California men, these diseases caused only three per cent of the deaths of SDA men.

The improved life expectancies of SDA men might be attributed to their above-average socio-economic position. But when the authors compared the lowest and highest-income groups among SDA men, they found no significant differences in death rates for the various diseases. There was no significant difference in respiratory illness deaths, for instance, among 3,212 men with professional and managerial jobs and 1,825 semi-skilled clerks and laborers.

The authors obtained their information on the non-smoking Seventh-Day Adventists through church records, which are fairly

(Continued on Page 686)

against the usual gram-negative urinary pathogens

Why use five...where **one** will do?



In a recent 217-patient hospital study,¹ urinary tract infections were treated with a variety of widely prescribed antimicrobial agents including: a sulfonamide (40 patients), chloramphenicol (20 patients), nitrofurantoin (33 patients), nalidixic acid (30 patients), tetracycline (27 patients), colistimethate sodium (22 patients) ... and 2 combinations of 5 agents each (45 patients). The 2 combinations were selected to afford maximal theoretical antibacterial coverage against the usual urinary pathogens. They were (1) tetracycline, chloramphenicol, nitrofurantoin, ristocetin and polymyxin B; and (2) tetracycline, chloramphenicol, erythromycin, nitrofurantoin and colistimethate sodium.

This clinical study shows that the two combinations of antibiotics were not superior to some of their single components. The authors point out that antibiotic antagonism often negates theoretical advantages of multiple therapy. Coly-Mycin Injectable (colistimethate sodium) was one of the single components that was shown to be equal to the combinations and eradicated bacteriuria in two-thirds of the patients.

Theoretical choice of multiple antibacterial therapy has been shown to be no more effective than one well-chosen agent which also offers least patient exposure to possible side reactions, toxicities, allergic manifestations and higher drug costs.

1. McCabe, W. R., and Jackson, G. G.: New England J. Med. 272:1037, 1965.

in gram-negative urinary tract infections often the single well-chosen agent



Coly-Mycin[®] Injectable

(colistimethate sodium)

Indications: Especially indicated for the treatment of severe acute and resistant chronic urinary tract infections due to sensitive strains of gram-negative organisms. Also indicated in respiratory tract, surgical, wound and burn infections and in septicemia due to sensitive organisms. Particularly indicated when any of these infections are caused by sensitive strains of *Pseudomonas aeruginosa*.

Adverse Reactions: Occasional reactions such as circumoral paresthesias, tingling of the extremities, pruritus, vertigo or dizziness may occur. Reduction of dosage may alleviate symptoms. Therapy need not be discontinued, but such patients should be observed with extra care.

Warning: Patients should be cautioned not to drive vehicles or use hazardous machinery while on therapy.

Precautions: In cases of impaired or suspected renal impairment, use with greater caution and reduce dosage in proportion to extent of impairment. Transient elevations of BUN have been reported. As a routine precaution, appropriate blood studies should, therefore, be made during prolonged therapy.

As with all polypeptides, the possibility of muscular weakness, including apnea, due to inadvertent overdosage or normal dosage in the presence of impaired renal function, should not be overlooked. In cases of apnea, medication should be promptly discontinued and assisted respiration given until serum levels fall and normal breathing is restored.

Other antibiotics, such as kanamycin, streptomycin, dihydrostreptomycin, polymyxin, and neomycin, may also have varying neurotoxic or nephrotoxic potential. They should be used with great caution concomitantly with Coly-Mycin Injectable (colistimethate sodium).

For deep intramuscular injection only.

Dosage: By the I.M. route only, in 2 to 4 divided doses ranging from 1.5 to 5 mg./Kg./day (0.7 mg. to 2.3 mg./lb./day). Average adult dose is 2.5 mg./Kg./day (1.1 mg./lb./day). In the presence of bacteremia, septicemia, or other serious infection, greater than average doses may be required; however, maximum daily doses should not exceed 5 mg./Kg. (2.3 mg./lb.) where renal function is normal.

Not recommended against *Proteus*.

Colistin is also available (as colistin sulfate) in: Coly-Mycin[®] Pediatric for Oral Suspension (not for systemic use), and Coly-Mycin[®] Otic with Neomycin and Hydrocortisone.

Full information is available on request.



NEW SMOKING-CANCER LINK

(Continued from Page 683)

complete and up-to-date, they said. Church records were checked against physicians' records, autopsies, etc., to determine cause of death. These statistics were compared, in turn, with those available for the general population of California.

"These comparisons reveal again the strongly positive history of smoking to be found in those with respiratory tract cancer or chronic pulmonary disease," the authors said. "In this instance, that correlation is seen in respiratory deaths both in a currently non-smoking population, but including some individuals with a prior tobacco exposure, and in men of the California population, two-thirds of whom have a history of cigarette smoking."

In several years of investigation, Drs. Lemon and Walden said, they "have yet to find a single case of epidermoid or anaplastic carcinoma of the lung in an SDA man who did not also have a history of cigarette smoking."

Are there other factors than abstaining from tobacco and alcohol which may decrease mortality risk among Seventh-Day Adventists?

"The SDA's tend to follow a modified vegetarian diet and to avoid tea and coffee," said Drs. Lemon and Walden. "They have outlined and promoted a way of life which includes adequate rest, recreation, exercise, avoidance of tension and worry, good hygiene, and prompt cooperation with medical care. We know of no way to measure the influence of such factors."

"We believe that the present report confirms in some degree the prediction . . . that lung cancer would decline as a significant death risk if cigarette smoking ceased in the United States," the authors said.

"Our studies among SDAs lead us to the conclusion that male longevity in the United States would be significantly increased, with a corresponding decrease in morbidity and mortality and if cigarette smoking were to become an unacceptable social habit."

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tients are accepted and departmentalized care is provided according to sex and the degree of illness.

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Medicine, Stamps, and the History of Man

By Joseph H. Kler, M. D.*

Stamps of all nations are a record of their culture. As a physician interested in the history of man, it is only natural that I should be interested in stamps recording the history of medicine.

If we define medicine as the promotion of health, the prevention of illness, the restoration of health and rehabilitation, then our history of medicine will be the story of man from the time he emerged from the mists of antiquity. The first practitioner of the healing art was the individual human being in his struggle for self preservation. Knowledge is cumulative and it can be assumed that the tribal medicine man was the first actual practitioner of medicine. This type of medicine is still popular among various primitive

peoples. Shamanism is still practiced in Asia and Voodoo medicine in Africa and the West Indies.

It is accepted that Imhotep was the first Egyptian physician and Aesculapius was the first Greek physician. Both were deified after death. However, in this evolutionary process of medicine from "mystery and magic" through stages of philosophic thought into scientific endeavor every great mind of history played a part.

Imhotep lived about 2950 B. C. and was the grand vizier of King Zoser. He designed the step pyramid at Sakkara built as a tomb for King Zoser. It is the earliest large stone structure known and today, some 5,000 years after it was built, it is unrestored and essentially unchanged.

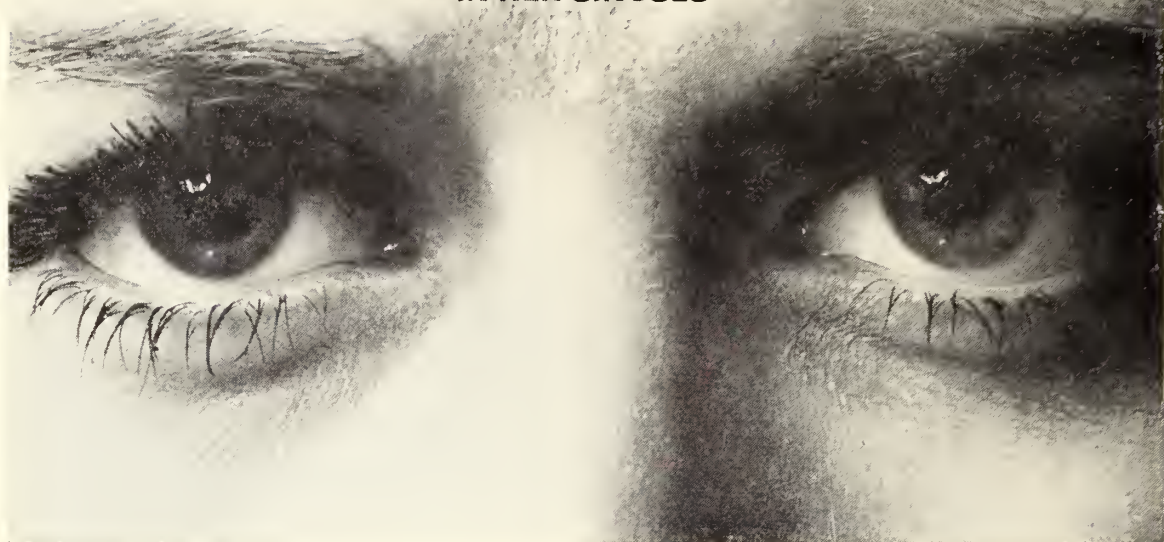
The ancient Hebrews contributed much in the area of public health, India of the same period to reconstructive medicine and China to therapeutics. These contributions were

*Dr. Joseph H. Kler, a distinguished New Jersey physician and surgeon, is the owner of one of the world's most extensive collections of Medicine on Stamps.

Hygeia, goddess of health Imhotep Alexander the Great Hippocrates of Coos



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IN HER SINUSES



ACHROCIDIN®

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Each tablet contains:

ACHROMYCIN® Tetracycline HCl 125 mg
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Caffeine 30 mg
Salicylamide 150 mg
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The patient can feel better while getting better. ACHROCIDIN brings the treatment together in a single prescription—prompt symptomatic relief together with early, potent control of the tetracycline-sensitive organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

Effective in controlling complicating tetracycline-sensitive bacterial infection and providing symptomatic relief in allergic diseases of the upper respiratory tract.

Contraindication—History of hypersensitivity to tetracycline.

Warning—If renal impairment exists, even usual doses may lead to liver toxicity. Under such conditions, lower than usual doses are indicated and if therapy is prolonged, tetracycline serum level determination may be advisable. Hypersensitive individuals may develop a photodynamic reaction to natural or artificial sunlight during use. Individuals with a history of photosensitivity reactions should avoid direct exposure while under treatment and treatment should be discontinued at first evidence of skin discomfort.

Precautions—Some individuals may experience drowsiness, an-

rexia, and slight gastric distress. If excessive drowsiness occurs, it may be necessary to increase the interval between doses. Persons on full dosage should not operate any vehicle. Use may result in overgrowth of nonsusceptible organisms. If infections appear during therapy, appropriate measures should be taken. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Infections caused by beta-hemolytic streptococci should be treated for at least 10 full days to help prevent rheumatic fever or acute glomerulonephritis. Use of tetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect has been observed in usual short treatment courses.

Average adult dosage: 2 tablets four times daily, given at least one hour before, or two hours after meals.

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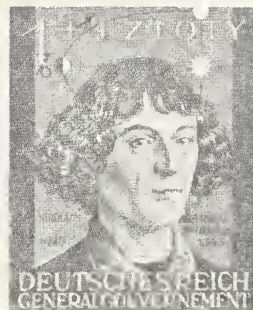
Pythagoras



William Harvey



Galileo Galilei



Copernicus

relatively small to the progress of medicine but they were significant and can be illustrated philatelically.

The civilization of ancient Greece gave us the foundations of present day medicine. Aesculapius was the Greek counterpart of the Egyptian Imhotep. Stamps honoring him have been issued by Spain and Algeria while Romania and Greece have honored his daughters Hygieia and Panacea.

Ancient Greek philosophers sought all knowledge and their contributions to medicine were more than significant. Pythagoras probably contributed most to medicine through his philosophic concepts of life. His humoral theory dominated medicine from 500 B. C. to the middle of the 19th century. It is also interesting to note that he was the first to call the earth round. Aristotle was probably the greatest philosopher-physician. He was the teacher of Alexander the Great.

Alexander was deeply interested in medicine and actually practiced military medicine.

He started the Medical School in Alexandria, Egypt. Its medical library was unsurpassed in the ancient world.

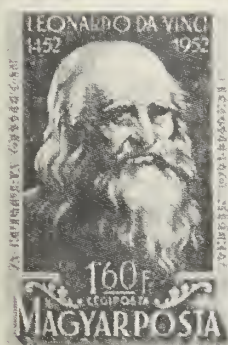
'Philosophic Medicine', if we may use the term, reached its peak during this period. The philosopher-physicians ignored the patient as an individual. Hippocrates, a member of this illustrious group of ancient Greeks, recognized the problem. Through his ability and force of character, he separated medicine from philosophy and thus is considered the Father of Medicine as we know it today. More than three centuries before the birth of Christ, he wrote the first principles of medical ethics . . . "A physician should be an upright man, instructed in the art of healing . . . modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." This Code of Hippocrates is the foundation upon which the medical profession's Principles of Ethics still stand.

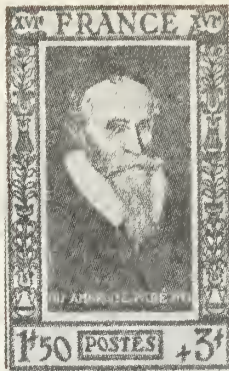
Leonardo da Vinci

Francois Rabelais

Andreas Vesalius

Maimonides





Ambroise Pare



Conrad Roentgen



Goethe



Theodore Billroth

Generally speaking, the leaders of Roman medicine were non-Romans and their contributions to the progress of medicine were not too significant.

Tracing the history of medicine from the Middle Ages to the present can excite and satisfy the tastes of everyone. Again, broadly speaking, at the time of the discovery of America by Columbus, there was enlightenment in almost every field of human endeavor and with the introduction of printing, scientific information became more available. Intellectual giants as the physician Leonardo Da Vinci of Italy, the medical scientist Roger Bacon of England, and the physician Francois Rabelais of France made a tremendous impact upon the progress of Western civilization as well as on medicine. Medicine in the Renaissance, the 16th, 17th, 18th and in the 19th century advanced in keeping with scientific and sociologic progress.

Certain individuals have dominated medicine or have made unusual contributions. This has been true since the dawn of what we call present day medicine. All were not physicians as we define physicians today.

Medical education was not easily available nor was it fully defined. Training for the profession depended largely upon the individual and many received excellent training through apprenticeships. Their contributions to medicine are the best criterion.

Avicenna, the Arab Prince of Physicians, dominated medicine throughout the civilized world for nearly 500 years. He had an unusually versatile mind and his writings covered all fields of knowledge. His translations of the works of Aristotle made the philosophic and scientific writings of this great philosopher available in the western world.

Rabbi Moshe Ben Maimonides was not only the outstanding Jewish physician but was also one of the great minds of all time. He was able to retain his Jewish identity even while serving as physician to the Sultan Saladin.

William Harvey's discovery of circulation is a keystone in the foundations of modern science. Antoine Laurent Lavoisier's discovery of oxygen was basic to the study of chemistry and physiology. Tragically, he was

Louis Pasteur

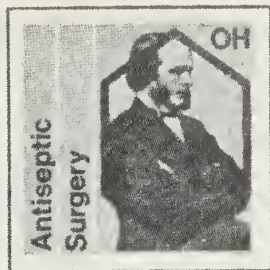
Pierre and Marie Curie

Claude Bernard





Anthony van Leeuwenhoek



Joseph Lister



Lister
Centenary



Johannes Purkinje

guillotined during the French Revolution.

The stories of Andreas Vesalius, Galileo Galilei and Nicholas Copernicus have surprising parallels. All three were brilliant and their thoughts were in conflict with existing dogmas. Only Copernicus was able to prove and to teach his theory of the order of the universe. Vesalius established the necessity for actual dissection for a full understanding of the anatomy of the human body. This placed the study of medicine on a scientific basis. Galilei's contribution to the knowledge of optics, gravitation and the measurement of time were fundamental. Ambrose Pare, although trained as a barber-surgeon, put military and general surgery on a scientific basis. Our own Benjamin Franklin invented bifocal glasses and built the first physiotherapy (electrical) apparatus to treat the Colonial Governor of New Jersey.

Medicine of today is highly scientific although we still need to retain the *art* of medicine. The scientific phase of medical history can be presented as "Modern Medi-

cine Foundations" with stamps issued to honor physicians and medical scientists who made these fundamental contributions.

Radium and the Curies are synonymous. Madame Marie Curie is the only individual to be honored twice by the Nobel Prize and her family is the only family to have three members so honored.

It is impossible for us to visualize the practice of medicine today without the aid of Wilhelm Conrad Roentgen's x-ray in diagnosis as well as in treatment.

Modern bacteriology was made possible through the efforts of Anthony van Leeuwenhoek, a humble store keeper in Holland, who developed microscopy. He was the first to actually see bacteria and red blood corpuscles under the microscope.

Louis Pasteur proved that infectious diseases were caused by bacteria. Robert Koch not only discovered the causative organism of tuberculosis but set down principles for the orderly study of all infectious disease organisms.

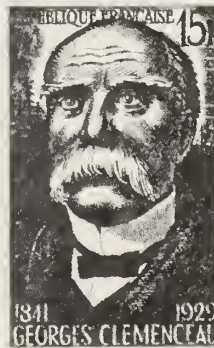
Dr. Jose Rizal

Dr. Sun Yat-sen

St. Luke

Georges Clemenceau

Lavoisier





Dr. Armauer Hansen,
discoverer of *Leprosy bacillus*



Dr. Albert Schweitzer



Father Joseph Damien

Physiology and metabolism is dominated by Claude Bernard, who is considered the greatest physiologist of all time. He founded experimental medicine and was the father of endocrinology. He was the first private citizen to be given a national funeral by France.

Joseph Lister of England introduced antiseptic surgery which led to our modern aseptic surgery and Theodore Billroth of Vienna made a tremendous impact upon surgery through his development of fine technics.

"Medicine and Literature" is represented by many physicians and medical scientists. Schiller and Goethe of Germany are most prominent. Goethe was the last of the great universal minds. His interests were limitless and everything he did was done well. He must be considered as an outstanding medical scientist. He first described the inter-maxillary bone, made sound observations on nutritional deficiency diseases and coined the word "morphology." He was responsible for

the appointment of Johannes Purkinje as Professor of Physiology and Pathology at the University of Breslau. This led to a most remarkable career of this great Czech physician. His contributions in embryology, histology and ophthalmology were basic. More structures of the human body are named after him than any other individual. He was the first to use the word "protoplasm," introduced the microtome, described the sweat-glands and was among the first to use the finger prints as a means of identification.

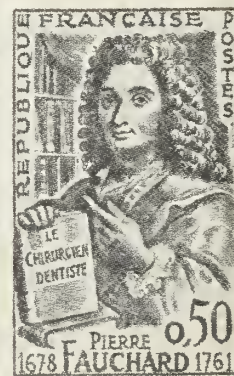
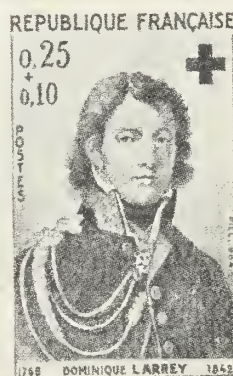
The late Queen Elizabeth of Belgium was the only Royal graduate of a medical school. She not only received her medical degree but also practiced medicine during the First World War.

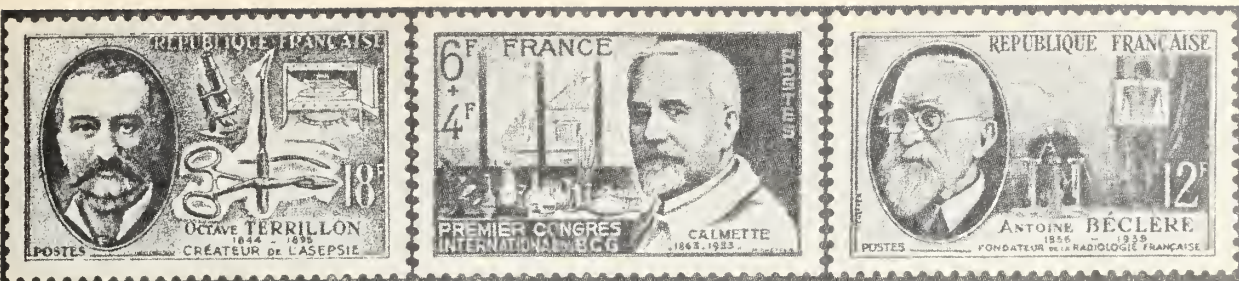
Many physicians have played leading roles in government. Georges Clemenceau led France through World War I. He also lived in America several years and practiced medicine in New York City and in Stamford, Conn. Most of the Central and South American countries have had physicians as presi-

Dr. Emile Roux, developed diphtheria antitoxin Jean N. Corvisart, physician to Napoleon I

Dominique Larrey, Chief Army Surgeon

Pierre Fauchard, first surgeon dentist





Octave Terrillon
surgeon, pioneer of antiseptics

Albert L. C. Calmette,
introduced anti-tuberculosis vaccine

Antoine Beclere,
pioneer radiologist

dents—the most recent have been Dr. Juscelino Kubitschek of Brazil and the remarkable Dr. Ramon Morales of Honduras. Toussaint L'Ouverture, the liberator of Haiti practiced medicine but there is no record of his training. William Henry Harrison is the only President of the United States of America with any formal medical training. He studied medicine under Dr. Benjamin Rush in Philadelphia.

Five physicians signed the Declaration of Independence. They were Benjamin Rush, John Bartlett, Oliver Wolcott, Matthew Thornton and Lyman Hall. All are pictured on the stamp of 1869 honoring the signing of the Declaration of Independence. Incidentally, this is the most costly of all medical stamps. Of these outstanding physicians, Dr. Bartlett became most distinguished in government. He served in the State Legislature of his home State of New Hampshire and became Chief Justice of the State Supreme Court and was also Governor of New Hampshire. He was also an outstanding physician. Dr. Wolcott was a delegate to the Continental Congress and was elected Governor of his home State of Connecticut.

Many physicians throughout the world have been active in social progress and governmental reform. They have taken active parts in the liberation movements of their countries and it is easiest to group these under the title of "Physicians and Voices of Freedom." Drs. Francisco Espejo and Lequeria Mejia of Ecuador are the first physicians to be honored philatelically. They were honored in 1899 as patriots, although Dr. Espejo was an outstanding physician particularly interested in public health. Dr.

Sun Yat-sen of China and Dr. Jose Rizal of the Philippines, were physicians who left permanent imprints upon the history of their native lands.

Religion has played a prominent role in the development of medicine. Christ was always interested in the sick and devoted much time to the healing of all ailments. St. Luke was a physician. Pope John XXI was a practicing physician particularly interested in public health and in ophthalmology. Pope John XXIII was a medical technician during World War I.

"Medicine and Missionaries" is fascinating. The names of Dr. Albert Schweitzer and Father Joseph Damien are known throughout the world. Their contributions are a permanent boon to mankind.

Medicine has played a prominent role in exploration. David Livingstone was a remarkable individual who contributed medically to our knowledge of nutritional deficiency diseases, to the medical missionary work and to exploration of Africa. His explorations along the Zambezi River and the discovery of Victoria Falls did much to open up Central Africa to civilization. Capt. James Cook and Daniel Solander were practicing physicians without known formal medical degrees. They were the first to control scurvy with reasonable success and they both made significant discoveries in the Pacific. Dr. Manasseh Cutler was philatelically honored for his work in the exploration and settlement of the Northwest Territory.

The history of medicine is a continuous one and its story is interesting from the point of view of the development of hospitals, nurs-

ing, Red Cross with medical progress and participation. The development of the various specialties and medical schools is fascinating. Ophthalmology is considered the oldest of the specialties. This world is designed for seeing people. More than 80 per cent of our impressions are derived through our sense of sight. Many stamps are available to develop this chapter into an outstanding one.

The broad area of public health is the greatest challenge and especially so if we include such diseases as malaria, leprosy and tuberculosis and the problems of nutrition. All have been with man since ancient times. The complete control of these problems is possible today and their eradication is within the grasp of man if only all known factors are coordinated and thoroughly applied.

The interest of Louis XIV popularized the treatment of malaria with cinchona bark (quinine) which had been used by the Indians in Peru. The discovery of the cause and its transmission led to the development of present day control methods that have been promoted under the sponsorship of the United Nations, the World Health Organization and the Pan-American Health Organization. The United States has been a leader in this work and there are stamps to illustrate the entire story.

The story of tuberculosis is equally interesting and can be illustrated to picture the entire story from the development of sanitarium in the treatment of tuberculosis to the development of present day preventive and treatment methods made possible by the discovery of the tuberculosis bacillus by Dr. Robert Koch and the introduction of chemotherapy by Dr. Selman Abraham Waksman.

Nutrition is particularly challenging. Food is a necessity for life and man has devoted time and effort to it for his survival. The development of cereal grains and the making of bread are among the greatest accomplishments of man. The first cereal grain was millet which was developed in Asia. The last cereal grain was the maize developed from teocintle by the Maya Indians of Guatemala.

The Egyptians developed bread and this has been modified and improved by many peoples. One of the real reasons for the downfall of the Roman Empire was the shortage of cereal grains for bread. Napoleon learned this lesson of history and throughout his campaigns he insisted that not only his army but also the people at home have an adequate supply of bread. It was ironic for him to suffer disaster in his campaign to conquer Russia through miscalculation on the availability of wheat for his army in Russia. The Russians upset these calculations by taking their wheat with them as they retreated. Thus, Napoleon's soldiers were left without bread, the very food they depended upon. In their retreat they were decimated through starvation and the corollary diseases. We still depend upon bread as a basic food item and the bread of today is supplemented to



Dr. Walter Reed

supply vitamins and minerals so necessary for proper growth and health. American medicine has played a particularly prominent role in this history of nutrition.

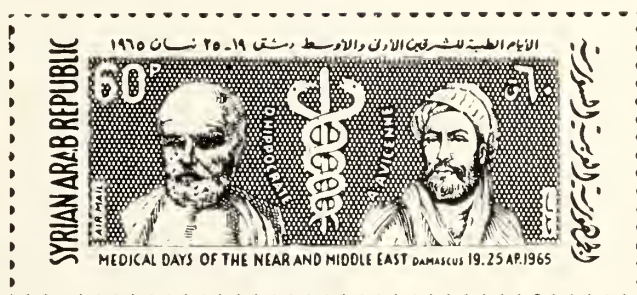
Epidemics, plagues, malaria, yellow fever and various other tropical fevers have been particular problems throughout the history of man. Tremendous progress has been made through the work of dedicated individuals. Physicians and medical scientists of many nations have contributed. The work of Dr. Walter Reed was primarily responsible for present day public health measures and

procedures. It is interesting to note that Dr. Reed's personal problems were probably entirely responsible. Dr. Reed received his medical degree at the age of 17 as the youngest known medical graduate. He started to practice medicine at a time when a beard was a virtual prerequisite for a physician. Dr. Reed had few whiskers let alone a flowing beard such as his contemporaries had. As a result, he could not establish a successful medical practice and he decided to join the U. S. Army Medical Corps. This little quirk

of fate proved to be such a boon to humanity.

There is no limit to this fascinating story and it can be illustrated with really pertinent stamps, proofs, souvenir sheets and all the philatelic items so dear to the heart of any stamp collector. It, also, can be done in any way which pleases the collector.

It is this pleasure that is the real value in collecting medical stamps. The story they have to tell is fascinating because it is the continuing and never-ending story of man.



Hippocrates

Avicenna

World's First Camp For Diabetics

Thirty-six years ago a physician and his wife with a few helpers planted 25,000 pine seedlings which grew to form the shelter for the world's first camp for diabetic children. During the camping experience and through the guidance of camp personnel, the diabetic child learns to enjoy outdoor living, mixes with other diabetic children which helps him realize he is not alone. He learns to adjust to his diabetic condition and to live as normally as possible. Although a controlled diabetic (one whose blood sugar does not remain above normal levels more than 6 hours in 24) is capable of every physical and mental achievement of the normal child, some diabetic children lack initiative because they fear insulin reactions. At the camp, however, the children are shown that it is not necessary to limit activity, as activity helps burn up sugar normally and reduces the insulin

dosage. The camp of 85 acres has rustic, permanent buildings, including a Great Hall, dispensary, bath houses, diet kitchen, handicrafts shop, sleeping cabins, a swimming pool, tennis courts, archery lanes, a baseball diamond, and activity buildings. Less than one third of the operating cost of the camp is realized from camper fees which are determined by the family's ability to pay. Except for medical and dietetic care, camp life includes the usual sports and recreational activities. The only out-of-the-ordinary activity is "Insulin Parade" each morning before breakfast, when nurses administer each child's prescribed dose of insulin. Each camper's food is carefully weighed and checked. The name of the camp is Ho Mita Koda, which means "Welcome, my friend." (Betty John: "Evergreen miracle," *M. D.'s Wife*, July 1966)

**brings
peace to the
hyperactive
colon**



CANTIL[®] (mepenzolate bromide)

helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function... Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects... Urinary retention, noted in two cases was eliminated in one by reducing dosage."¹

IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withdraw in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

¹ Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC.

Milwaukee, Wisconsin 53201



**PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY**

DACTILASE®

Each tablet contains:

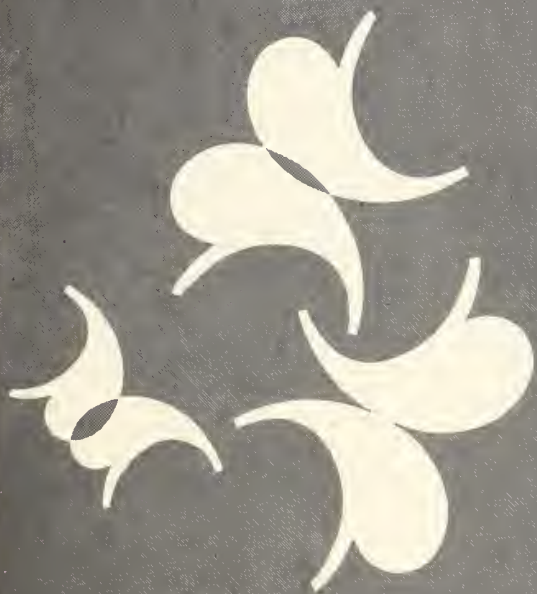
Dactil® (piperidolate hydrochloride), 50 mg.;
Standardized cellulolytic* enzyme, 2 mg.;
Standardized amylolytic enzyme, 15 mg.;
Standardized proteolytic enzyme, 10 mg.;
Pancreatin 3X** (source of lipolytic activity),
100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established.

**As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

WHEN
STOMACHS
ARE ALL
BUTTERFLIES

AND
GAS



In chronic or acute indigestion, fluttery, gassy stomachs obtain prompt, gratifying relief through the antispasmodic, surface anesthetic and enzymatic activity of Dactilase. Dactilase decreases hypermotility and pain and reduces the production of gas. Dactilase does not induce stasis, but helps restore normal tone. It has little or no effect on enzyme secretions, but *adds* enzymes, thus contributing to the digestive efficiency of the patient.

Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201



PRODUCTS
FOR PATIENTS
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EVERY DAY

For cold hands and feet, nothing beats hot stoves—but they *are* awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients *like* Gerilid and *know* they are getting relief.

**WARMTH
FOR COLD
HANDS AND FEET**



GERILID™

Each chewable tablet contains:
nicotinic acid (niacin) 75 mg. and
aminoacetic acid (glycine) 750 mg.

Administration and Dosage: One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

Side effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

Supplied: Packages of 50 chewable tablets.

Also available in liquid form as Geriliquid®, in bottles of 8 and 16 ounces.

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PRODUCTS
FOR PATIENTS
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EVERY DAY

WHAT'S THE
COMMON
DENOMINATOR? ... IRON



In fact, there's as much iron...250 mg.
...in a 5 cc. ampul of Imferon (iron dextran
injection) as in a pint of whole blood.
When iron deficient patients are intolerant
of oral iron...or orally administered iron
proves ineffective or impractical...or if
the patient cannot be relied upon to take oral
iron as prescribed, Imferon (iron dextran
injection) dependably increases hemoglobin
and rapidly replenishes iron reserves.

IMFERON® (iron dextran injection)

IN BRIEF: ACTION AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

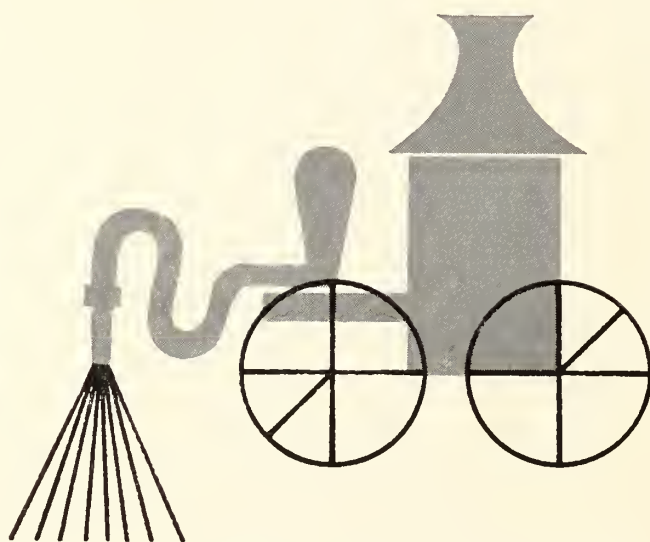
SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201



PRODUCTS
FOR PATIENTS
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EVERY DAY

**SAVES
LIVES
SAVES
MONEY
WASTES
WATER**



METAHYDRIN (trichlormethiazide) is prescribed by physicians because it not only approximates the diuretic efficacy of parenteral meralluride injection . . . but, *it is the least expensive of all "brand-name" thiazides.* Therefore, when you prescribe METAHYDRIN (trichlormethiazide) your patients receive the thiazide diuretic that removes a little more salt and water than earlier thiazides, with relatively less loss of potassium . . . and, it's therapy they can more easily afford . . . *only pennies a day.*

METAHYDRIN®

(trichlormethiazide)

oral diuretic

Dosage: One 2 or 4 mg. tablet once or twice daily.

Precautions: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

Side Effects: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have occasionally been noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by the administration of thiazides.

Contraindications: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

How Supplied: Bottles of 100 and 1000 tablets.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 5320



LAKESIDE

PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY

**BRING IT DOWN
AND
KEEP IT DOWN**

190
102

Metatensin lowers blood pressure and keeps it low—effectively and economically. It combines reserpine with trichlormethiazide which affords more potent saluresis with less loss of potassium than from earlier thiazides. Reserpine contributes antihypertensive effect by relieving anxiety and tension. Metatensin is well-tolerated over long periods; with its effectiveness and economy it assures antihypertensive therapy you and your patients can stay with.

METATENSIN®

Each scored tablet contains:
METAHYDRIN® (trichlormethiazide)
2 mg. or 4 mg. and
Reserpine 0.1 mg.

Usual adult dose: One tablet twice daily. **Precautions and side effects:** Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery.

Contraindications: Complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.

Supplied: Metatensin tablets, 2 mg., 4 mg.—bottles of 100 and 1000.

LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201



PRODUCTS
FOR PATIENTS
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EVERY DAY

When depressed patients say:



"I can't sleep at night"



"I'm tired all day long"

NORPRAMIN[®]

(desipramine hydrochloride)

non-sedating • rapid-acting
ANTIDEPRESSANT

helps restore normal patterns of sleep and activity

Norpramin (desipramine hydrochloride) often reverses the signs and symptoms of depression including sleep disturbances, feeling of sadness, guilt, anxiety, worthlessness and bodily complaints without physical basis. In 2-5 days most patients become more hopeful, active and less weighed down by their problems.

Norpramin (desipramine hydrochloride) has only slight sedative qualities, nevertheless sleep disturbances and restlessness are relieved as depression is lifted. If anxiety or tension develop or persist a tranquilizer may be added or dosage reduced. Side effects are usually mild, occurring in about 1 of 4 patients.

Indications: In moderate to severe depression—neurotic or psychotic. **Dosage:** Optimal results are obtained at a dosage of two 25 mg. tablets t.i.d. (150 mg./day). **Contraindications and Precautions:** Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of an MAO inhibitor. Safety in human pregnancy has not been established. **Adverse Effects:** Usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste", sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs. **Supplied:** Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

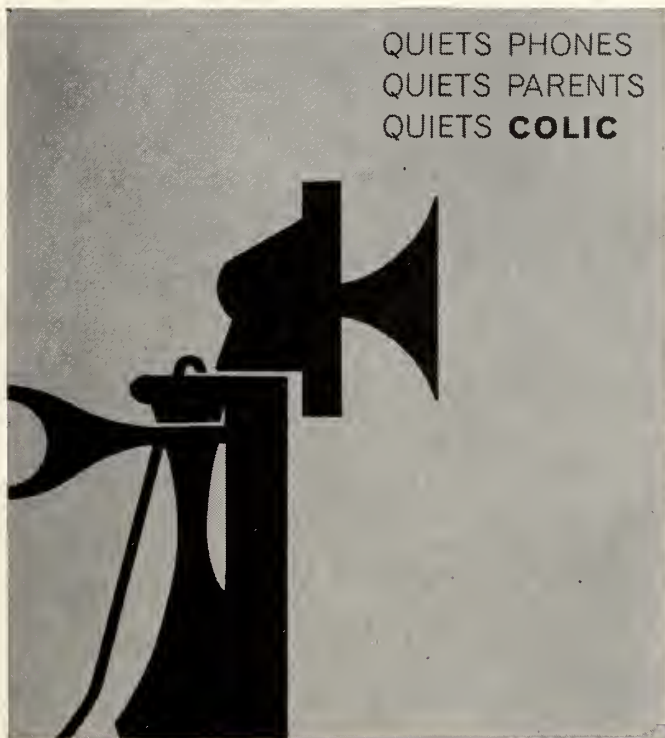
PRODUCTS FOR PATIENTS YOU SEE EVERY DAY



LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin 53201

In colicky infants Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying and improves feeding patterns. It permits sleep and rest for patient and family. The less than hypnotic amount of phenobarbital in the recommended dose affords a mild, calming action and enhances the antispasmodic action of Piptal (pipenzolate bromide). The latter drug, as reported in the medical literature, has a favorable ratio of effectiveness to side-effects which is unusual in anticholinergics and thus is particularly appropriate to pediatric use.

QUIETS PHONES
QUIETS PARENTS
QUIETS **COLIC**



**PEDIATRIC PIPTAL®
WITH
PHENOBARBITAL**

each cc. contains 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol.

Pleasant-tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be given by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. It is contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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FOR PATIENTS
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EVERY DAY

BREACH OF PATIENT'S CONFIDENCE SOMETIMES JUSTIFIED

When is a breach of patient-physician confidence justified?

Six leading psychiatrists have concluded that breaches are permissible only under the rarest of circumstances, as when a patient is dangerous to himself or others. But, they stressed, the danger must be very clear—being a nuisance is not enough.

The physicians considered the issue in the wake of the recent mass slaying at the University of Texas, committed by a student who had previously been seen by a campus psychiatrist.

When, after the killings and the student's death, the text of his interview—including references by the student to his family—was made public, professional attention was focused anew on the perennial, complex problem of confidentiality.

When are threats idle and when are they dangerous? "The judgment of the physician is determinative," according to Dr. Paul H.

Blachly of the University of Oregon Medical School. "We have many patients with violent feelings who, we are certain, will do nothing about them. Naturally, we wouldn't reveal confidences under such circumstances. But with a firm feeling that something will happen, we must take whatever course is necessary."

Dr. Manfred S. Guttmacher, a forensic authority who testified at the Jack Ruby trial, made the point that the ground rules of physician-patient confidentiality change under certain legal circumstances. If material has been released publicly at an open hearing, he said, "I don't think the physician is obligated any longer to maintain confidentiality."

Dr. Guttmacher cautioned, however, that "there are certain things one doesn't want to relate even in court unless he has to, such as material dealing with a patient's sex life; even in a court room the physician should always have the interests of the patient in mind."



for psychiatric treatment

Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals □ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients

and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction □ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy □ *We will be pleased to provide further information upon request.*

ACCREDITED BY THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

peachtree hospital

41 PEACHTREE PLACE, N. E. / TELEPHONE 873-5681 / ATLANTA 9, GEORGIA

MOLECULAR REMODELING—

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.¹ Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,² the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.³

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.⁴ However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.⁵

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors—in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.⁶ The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.⁷ And, like its predecessor, acetazolamide precipitated mild acidosis. Its prolonged use could result in hypokalemic acidosis.⁷

The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide

group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.⁸ Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.^{9,10}

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.¹¹ It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.¹¹ The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.¹¹ Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.⁷

Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.¹²

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with

doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."¹³

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

Contraindications: Severe renal impairment; previous hypersensitivity.

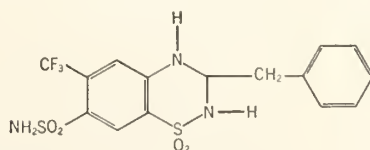
Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemias and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin \bar{c} K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

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If Johnny can't read, consider his basic problem of understanding the difference between left and right. Discrimination does not develop in normal children until nine or ten years of age, according to Daniel R. Boone, Ph. D., of the University of Kansas Medical Center. "The learning of reading, writing, arithmetic and music may be hampered for the youngster with left-right discrimination difficulties," he said. For example, the only visual difference between "b" and "d" is that the stem is to the left of the circle in one, and to the right in the other. Special training may be needed in some cases. Dr. Boone and his associates are developing a test to measure a child's success in verbal discrimination between left and right.—*Jour. Kansas Med. Soc.*, March, pp. 132-133.

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Warnings—Medication should be discontinued pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. Medication should be withdrawn if examination reveals papilledema or retinovascular lesions. Since the safety of Ovulen therapy in pregnancy has not yet been established, it is recommended that, in a patient who has missed two consecutive menstrual periods, pregnancy be ruled out before oral contraceptive therapy is continued.

Precautions—Because Ovulen may aggravate a tendency toward fluid retention in some patients, it should be administered cautiously to patients with a history of renal or cardiovascular disease (including hypertension), asthma, epilepsy or migraine. Any possible influence of long-term Ovulen therapy on pituitary, adrenal cortical, ovarian, hepatic or uterine functions requires further study. Oral contraceptives also should be administered cautiously to diabetic patients since a decrease in glucose tolerance has been observed in some patients taking these drugs. Patients on Ovulen may occasionally show abnormal glucose tolerance tests, but this does not necessarily indicate the presence of diabetes. Significant increases in platelet count, prothrombin and proconvertin tests, plasma thrombotic activity and plasma protolytic activity have been reported.

Since estrogens may affect results of serum protein bound iodine and other thyroid function tests, these tests should not be considered definitive until Ovulen therapy has been discontinued for at least sixty days. Adrenal steroid serum levels and excretion may be affected by estrogens; the Metopirone® (SU-4885) test of pituitary-adrenal function may also be depressed. Abnormalities in hepatic function tests have also been reported, including some interference with dye excretion by the liver. This interference may give rise to Bromsulphalein® retention and jaundice in susceptible individuals. Serious liver dysfunction should be ruled out before continuing Ovulen administration when abnormalities in liver function tests occur.

Patients with a history of psychic depression should be observed carefully during treatment with oral contraceptives, and such treatment should be discontinued if depression recurs to a serious degree. Pre-existing fibroids may increase in size during Ovulen therapy. Such fibroids may regress to pretreatment size after Ovulen is stopped. In the event of breakthrough bleeding the possibility of nonfunctional causes should be borne in mind. Additional means of contraception should be used during the first seven days of Ovulen administration in the first treated cycle, because early ovulation may possibly occur.

Side Actions—The following adverse reactions have been reported with Ovulen; however, a causal relationship to Ovulen administration has not been established in all of the listed complaints: headache, dizziness, depression, breast complaints, amenorrhea, chloasma, vomiting, allergy, edema, migraine, pulmonary embolism, thrombophlebitis, visual difficulties, nervousness, rash, itching, decrease in libido, tiredness, malaise, hair loss and hair growth. A small incidence of nausea, spotting and breakthrough bleeding has been reported; these complaints tend to diminish markedly or disappear after the first cycle of treatment. Some of these side actions have required discontinuance of the drug.

Dosage—One tablet daily for 20 consecutive days beginning 5 days after the onset of menstruation.

Before prescribing see Detailed Product Information, Ovulen. An extensive list of references on Ovulen is included in the literature mailed to physicians.

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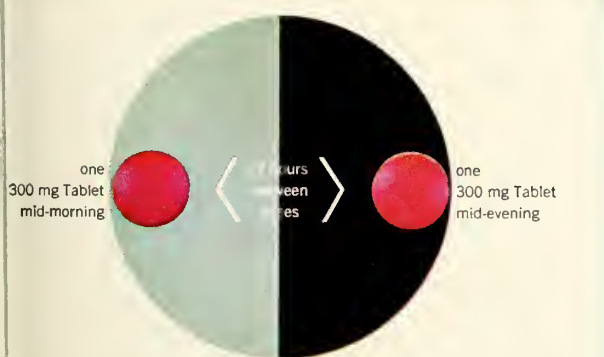
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Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warnings—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of ultraviolet and short exposure may produce an exaggerated skin reaction which may range from erythema to severe skin manifestations. In a smaller proportion, phototoxic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essen-

tial. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; **Tablets:** film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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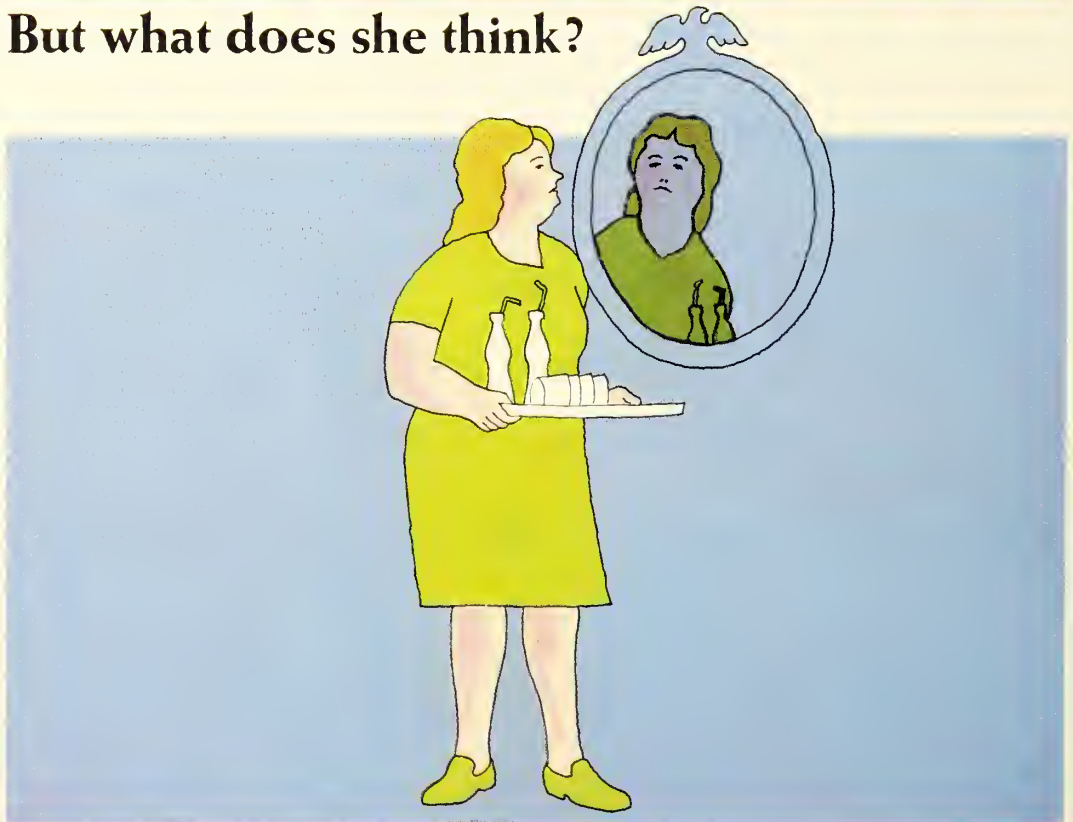
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Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.



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Taste Abnormality In Diabetics

Diabetics of different age groups, treated or untreated, show a taste abnormality for sugar, according to a study conducted by two sets of independent investigators in Baltimore and Montreal, Canada.

The taste threshold for sugar was determined in 79 diabetics and an equal number of non-diabetics, matched for race, sex and age. An elevation of the level at which diabetics detected the sweet taste of dextrose was detected not only in various groups of diabetics with symptoms, but also in diabetics without any. Since some of the latter patients had a family history of diabetes, they could conceivably be classified as prediabetics.

Drs. Jean-Louis Schelling and Léon Tetreault studied one group of patients at the University of Montreal; three other groups were studied in Baltimore by Dr. Louis Lasagna and Miles Davis, M. S., of Johns Hopkins University.

"Our data suggest that the taste abnormality is an early manifestation of diabetes," the investigators said. Whether the taste abnormality is genetically related to diabetes mellitus requires further study among families of diabetics.

The threshold for dextrose of the normal subjects ranged from 9 to 13 mg. of dextrose per ml. In diabetics, the mean taste threshold ranged from 15 to 30 mg. per ml., a figure 20 to 50% higher than that for the nondiabetics. Sensitivity of taste for sugar thus appears to be impaired in diabetes, the authors said.

Tests also were run to determine taste thresholds for salt. No significant differences were found between diabetics and nondiabetics.—*Lancet*, Mar. 6, pp. 508-511.

New England's first graduate program for physical therapists has been established by Sargent College of Boston University, and will begin in the fall of 1966. Incoming students must have two years experience in the practice of physical therapy as well as a bachelor's degree and a certificate in physical therapy.

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MEDICINE AND CHIROPRACTIC

By

H. Thomas Ballantine, Jr., M. D.

For the past 53 years a well-organized and determined band of practitioners has importuned the state legislatures of this country for permission to administer to the health needs of the people. Their efforts have been so successful in the political areas that 48 states license them. These individuals call themselves chiropractors; their aggregate number is variously estimated at from 15,000 to 25,000, and it is claimed that about four million people consult them in any one year.

In 1966, the American Chiropractic Association published a brochure entitled *What Medicine Really Thinks About Chiropractic*. The authors were C. W. Weiant "dean emeritus of the Chiropractic Institute of New York" and S. Goldschmidt, "member Special Committee on Political Education, American Chiropractic Association." Two statements in their introduction to a defense of chiropractic present the salient points to be dealt

with here. The first reads as follows:*

"In this brochure we present the inside story of a conflict of which the average layman is but dimly aware. It is the story of struggle between two professions, medicine and chiropractic, a struggle in which organized medicine seeks relentlessly to stifle the development and spread of the younger healing art, and chiropractic seeks to survive. Seen through the eyes of the M. D., the issues were at first simple enough. Medicine stood for science while chiropractic was synonymous with quackery, and the two obvious remedies were public education and legal harassment."

The second important statement by these authors is "The present direction of the conflict poses a serious threat to a basic human right; namely the right to a doctor of one's choice, the right to follow a course of action with respect to one's person which, according to one's lights, holds the greatest promise for health and well-being, including the right to make a mistake."

These chiropractors have, then, raised several points which should be worth serious consideration. Those of greatest interest to this discussion are:

1. A definition of quacks and quackery
2. An inquiry into the role and obligation of the physician in reference to quacks and quackery
3. A definition of chiropractic

Dr. Ballantine is assistant clinical professor of surgery at Harvard Medical School and visiting neurosurgeon at Massachusetts General Hospital. He received his B. S. degree from Princeton University, his M. D. degree from Johns Hopkins University Medical School, and an M. S. degree from the University of Michigan. His residencies in surgery and neurosurgery were at Massachusetts General Hospital and the University of Michigan Hospital and Medical School. During World War II, Dr. Ballantine was an Army surgeon. In addition to the American Medical Association, his memberships include the American College of Surgeons, American Academy of Neurological Surgery, Harvey Cushing Society and the Excelsior Surgical Society.

Text of address delivered at Third National Congress on Medical Quackery, Chicago, Illinois, October 14-16, 1966.

*This and subsequent quotations are reproduced verbatim from the sources indicated. The author assumes no responsibility for errors in spelling, grammar or syntax.

4. A description of the chiropractor as a health practitioner
5. The characteristics of chiropractic which might or might not qualify the chiropractor to be identified as a quack

To deal in an intelligent, impartial and objective fashion with the points raised by the chiropractors, acceptable definitions will be of prime importance.

Definition of a Quack

The term "quack" is used commonly but usually in an indefinite manner; yet the word is capable of being clearly defined. One such definition will be used in this essay as it appears in the 24th Edition of Dorland's Illustrated Medical Dictionary: "one who fraudulently misrepresents his ability and experience in the diagnosis and treatment of disease or the effects to be achieved by the treatment he offers." The term "fraudulent," lest it be thought too severe to be included in this description of a quack is defined by Black's Legal Dictionary as: "A generic term embracing all multifarious means which human ingenuity can devise and which are resorted to by one individual to get advantage over another by false suggestions or by suppression of truth." A specific type of fraudulent activity called "constructive fraud" is further defined as "an act, statement, or omission which operates as a virtual fraud on an individual, or which, if generally permitted, would be prejudicial to the public welfare and yet may have been unconnected with any selfish or evil design."

It would appear that from a legal standpoint a quack need not be ipso facto criminally dishonest; he may be ignorant or deluded. It is true, however, that regardless of his motivation, education or mental stability the quack by definition does misrepresent his ability to diagnose and treat disease or the effects to be achieved by the treatment he offers. As a result of this misrepresentation, he carries out fraudulent activities which are

prejudicial to the health of the individuals consulting him and which are injurious to the public welfare.

Medicine and Quackery

Prior to the beginning of the 20th Century, it was possible for almost anyone in this country to set himself up as a health practitioner and to attempt to cure the ills of humanity in any fashion which appealed to him. For hundreds of years, however, physicians and surgeons dedicated to the discovery of the true nature of the cause and cure of disease had understood the necessity of exposing individuals who deceived the public by playing upon its superstitious and ignorant concepts concerning ill health. These individuals were and are quacks, and many of the most glaring examples of quackery were formerly to be found within the ranks of medicine itself. There was for this latter reason an additional obligation on the part of the medical profession to protect the public from misguided or dishonest practitioners. Only relatively recently has it been thought necessary to combat cultists and quacks and faddists in general.

The interest of the American Medical Association stems from the obvious fact that an organized group devoted to the same cause can be more effective than if each person within it acts upon his own initiative.

There has also developed in our culture what I have chosen to call "the moral obligation of the informed citizen." For example, groups of engineers, lawyers and even a nationwide organization called "The Better Business Bureau" seek to protect us from fraudulent activities in fields about which they have special knowledge. If, as a result of an educational process, teachers, scientists and laymen interested in the advancement of medical science and the healing of the sick become aware of the existence of forms of quackery in our society, then as informed citizens these individuals have the moral obligation to join in eliminating these fraudulent activities.

If it can be shown that, in the words of Weiant and Goldschmidt quoted earlier, chiropractic is synonymous with quackery, then some issue must be taken with their opening remarks: The confrontation between medicine and chiropractic is not a struggle between two "professions"; rather it is more in the nature of an effort by an informed group of individuals to protect the public from fraudulent health claims and practices.

For a chiropractor to be designated accurately as a quack according to the definitions used here, it is necessary to show only that he either misrepresents his ability to diagnose and treat disease or that he misrepresents the effects to be achieved by the treatment he offers, and that he does so by false suggestion and suppression of truth. It is not necessary to show that the chiropractor does these things out of selfish or evil design.

But—before arriving at an informed decision as to whether chiropractic is or is not a form of quackery, it is obviously necessary to examine carefully this so-called "younger healing art" and the practitioners who call themselves chiropractors.

What is Chiropractic?

Here again acceptable definitions are vitally necessary and for the purposes of this essay, one submitted in 1966 by the chiropractors to the Massachusetts Legislature and adopted by it in the passage of an act establishing a Board of Registration of Chiropractors will be used: Chiropractic, the science of locating and removing interference with the transmission or expression of nerve force in the human body, by the correction of misalignments or subluxations of the bony articulations and adjacent structures, more especially those of the vertebra column and pelvis for the purpose of restoring and maintaining health."

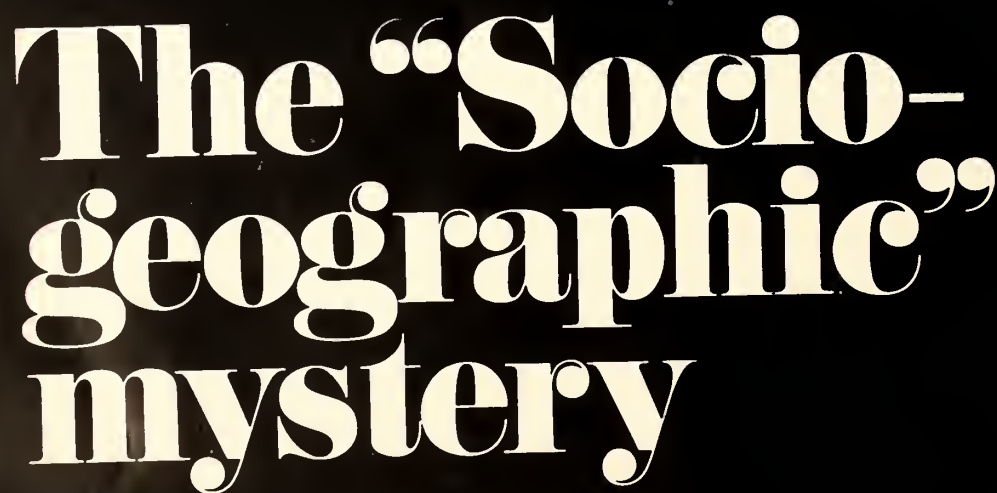
This definition was used and further elaboration in 1955, when an attempt was made to overturn a ruling of the Supreme Judicial

Court of Massachusetts that the practice of chiropractic was the practice of medicine. Paragraph four of the petition presented to the Court by a chiropractic association stated in part: "Chiropractic is a modern scientific method of healing, based on the theory that most human ailments or diseases are the results of a displacement of the vertebrae of the spinal column, resulting in abnormal pressure upon the nerves as they emerge. Such pressure prevents the constricted nerves from transmitting to the various bodily organs the mental impulse necessary for proper functioning. Chiropractic proceeds on the principle that the nerves emanating above each vertebrae regulate particular organs and, hence, the cause of different ailments and diseases can be localized; that health is possible when all organs function harmoniously, and that by ascertainment of the subluxation of the spine and by proper adjustment to release the pressure on the nerves caused thereby, the cause of the disease is removed and the body rendered capable of natural restoration to good health. The chiropractic method of adjustment is purely manual, and never resorts to drugs or surgery, and is the antithesis of the germ theory taught and accepted by physicians and surgeons and who treat human diseases as conquerable by the administration of drugs and medicines."

In another legal decision, *Lawrence versus the Board of Registration in Medicine*, the courts of Massachusetts have defined the practice of medicine as an undertaking "to cure the ills, to treat the ailments, to prevent the diseases and thus to relieve the suffering of the race." Furthermore, in 1955, as mentioned above, the Supreme Judicial Court of the Commonwealth of Massachusetts in an action entitled *Commonwealth vs. Zimmerman*, found that the practice of chiropractic was actually the practice of medicine.

In a book entitled *Chiropractic: A Modern Way to Health* written by Julius Dintenfass and published by Pyramid Books in 1966, a partial list of diseases said to be amenable to

(Continued on Page 718)



The "Socio- geographic" mystery

Why is one man's gastric ulcer another man's duodenal?



Geographic variation in the incidence of peptic ulcer is a familiar fact. But the proclivity of certain kinds of ulcer for certain geographic areas is a recently recognized phenomenon.^{1,2}

For example, in one particular Norwegian fishing village there is a tendency for patients to develop a gastric ulcer; anywhere else in Norway, ulcers are usually duodenal. Peruvians high in the Andes have more gastric ulcers than their compatriots in the lowlands. Why? Nobody knows.

Social variations, too. Even in the same geographic areas there are interesting variations. An Englishman's ulcer depends on his social standing—professional men suffer with duodenal ulcers, while workingmen have more of the gastric variety. In southern India the pattern is reversed. Here, duodenal ulcers are common among laborers and agricultural workers and rare among the upper classes.

Investigators are exploring every possible theoretical avenue in their search for the cause of peptic ulcer. Of all the factors implicated in ulcerogenesis, the one that is generally acknowledged to be of primary importance is hypersecretion of gastric acid.³⁻⁸ Or, as one author states it: "The medical management of peptic ulcer pharmacologically is, in the final analysis, concerned largely with the effective inhibition of peptic activity."³

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Indications: In addition to its primary indications for duodenal and gastric ulcer, Robinul (glycopyrrolate) is indicated for other GI conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Dosage should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet 3 times a day: in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.

Supply: Robinul (glycopyrrolate 1 mg.); Robinul Forte (glycopyrrolate 2 mg.); Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: May be habit-forming.) In bottles of 100 and 500 scored tablets.

References: 1. Jones, F. A., and Gummer, J. W. P.: Clinical gastroenterology, Springfield, Ill., Charles C. Thomas, 1960, pp. 322-3. 2. Bockus, H. L.: Gastroenterology, 2nd ed., vol. I, Philadelphia, Saunders, 1963, p. 468. 3. Sun, D. C. H.: Ann NY Acad Sci 99:153 (Feb. 28) 1962. 4. Moore, V. A.: Postgrad Med 38:216 (Sept.) 1965. 5. Dragstedt, L. R., Woodward, E. R., Storer, E. H., Oberhelman, H. A., Jr., and Smith, C. A.: Ann Surg 132:626 (Oct.) 1950. 6. Posey, E. L., Jr., Smith, P., Turner, C., and Aldridge, J.: Amer J Dig Dis 10:399 (May) 1965. 7. Lamphier, T. A., Siegel, L., and Goldberg, R. L.: Amer J Gastroent 37:551 (May) 1962. 8. Kasich, A. M., and Fein, H. D.: Ibid 39:61 (Jan.) 1963. 9. Epstein, J. H.: Ibid 37:295 (Mar.) 1962. 10. Moeller, H. C.: Ann NY Acad Sci 99:158 (Feb. 28) 1962. 11. Slinger, A.: J New Drugs 2:215 (Jul-Aug.) 1962. 12. Barman, M. L., and Larson, R. K.: Amer J Med Sci 246:325 (Sept.) 1963. 13. Shutkin, M. W.: Amer J Gastroent 38:682 (Dec.) 1962. 14. Fleshler, B.: J New Drugs 2:211 (Jul-Aug.) 1962. A. H. ROBINS CO., INC. Richmond, Virginia

MEDICINE AND CHIROPRACTIC

(Continued from Page 715)

chiropractic treatment is as follows: arthritis, asthma, bronchitis, bursitis, colitis, the common cold, constipation, digestive disorders, dysmenorrhea, hay fever, headache, hypertension, low back pain, mental illness, migraine and trigeminal neuralgia or tic douloureux. It is of some interest in reference to this last named painful and disabling affliction that the trigeminal nerve is confined wholly within the skull, has no connection with any spinal nerve, and is absolutely impervious to external manipulation.

A public information bulletin issued by the Spears Chiropractic Clinic of Denver, Colorado, states that "... we have treated several thousand cancer cases by chiropractic methods. Chiropractors treat cancer by adjusting the segments of the spine to correct vertebral distortions"

What (or who) is a Chiropractor?

Obviously he is one who practices chiropractic, but he is even more according to a brochure entitled "Planning A Career in Chiropractic" published as a vocational guidance manual by the Department of Education of the American Chiropractic Association. This brochure states: "The chiropractic doctor is a physician—a particular kind of physician. As such he is engaged in the treatment and prevention of disease and in the promotion of public health and welfare."

In summary then, chiropractors by their own definition are physicians engaged in the treatment and prevention of disease according to a particular theory which states that human illness is caused primarily by pressure upon the spinal nerves from dislocations of the spinal vertebrae and that cure is obtained by manipulating these vertebrae and restoring them to proper alignment.

What qualifications do chiropractors need in order to be licensed? In 1966, certain of these qualifications were set down by the

(Continued on Page 720)



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(tetracycline phosphate complex with analgesics and antihistamine)

With a single prescription, you can add all the known benefits of Tetrex (tetracycline phosphate complex) to the traditional relief provided by APC. At the same time Bristamin (phenyltoloxamine citrate), provides relief of allergic symptoms—watery eyes, rhinorrhea and congestion.

BRISTOL THERAPEUTIC SUMMARY. For complete information, consult Official Package Circular. **Indications:** Upper respiratory infections due to sensitive bacteria where concomitant symptomatic relief of fever, malaise and congestion is desired. **Contraindication:** A past history of hypersensitivity to one or more components. **Warnings:** Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). **Precautions:** Antihistamines may cause drowsiness and patients should not perform tasks

requiring mental alertness while taking this agent. Bacterial or mycotic superinfection may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be performed initially and monthly for three months. **Adverse Reactions:** Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis and allergic reactions may occur. **Usual Adult Dose:** Two capsules q.i.d. Continue therapy for at least 10 days in beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. **Supplied:** Bottles of 24 and 100.

BRISTOL

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MEDICINE AND CHIROPRACTIC

(Continued from Page 718)

Massachusetts Legislature. First a chiropractor has to be a high school graduate or to have "the equivalent of a high school education." Another important qualification is that he must not be "addicted to any vice to such a degree as to render him, in the opinion of the board, unfit to practice chiropractic." Finally, while all chiropractors must take an examination (prepared by other chiropractors), those who have been practicing illegally in Massachusetts may by virtue of a "grandfather clause" be allowed to take a less exacting examination than the chiropractors who attempt to come into the state from elsewhere.

A perusal of the list of the members of the faculties of various chiropractic colleges fails to disclose any scientists of national standing, and, indeed, there are few if any faculty members who are possessed of advanced degrees in any recognized specialty. One exception to this statement may be C. W. Weiant whose writings have been quoted previously. This man is a Ph. D. from Columbia University, New York. He obtained his advanced degree in anthropology, and the subject of his doctoral thesis was "An Introduction to the Ceramics of Tres Zapotes, Vera Cruz, Mexico."

It is interesting to note that the father of chiropractic, Daniel David Palmer of Davenport, Iowa, and Robert Koch, the discoverer of the bacillus of tuberculosis, lived and died about the same time. Koch was born in 1843 and died in 1910. He was a Nobel Laureate. The account of his discovery of the tubercle bacillus was published in 1882. Palmer was born in 1845 and died in 1913. His so-called discovery of chiropractic occurred in 1895. It may be useful to contrast and compare the lives of these two men.

Koch attended the University of Gottingen in Germany where he came under the influence of the great pioneer medical investigator, Jacob Henie. Bacteriology and the so-

called "germ theory of disease" became Koch's life's work. His discovery of the tubercle bacillus, the cause as physicians understand it of tuberculosis, was perhaps his greatest contribution, but he also set down very stringent requirements for proof that a particular organism or germ was responsible for a particular illness. These are known as Koch's postulates and state that:

1. The organism must be recovered in every case of the disease.
2. It must be grown in pure culture in the laboratory.
3. Inoculation of the organism into a susceptible animal must reproduce the disease.
4. The organism must be recovered from the experimental animal in pure culture.

These rigid criteria have been extended, with necessary modification by medical investigators, to all attempts to determine the cause of a given illness.

Medical science, moreover, recognizes that there are many causes of human illness but that they fall into important generic categories four of which may be used as examples.

1. Inherited defects—hemophilia
2. Infectious diseases—tuberculosis
3. Degenerative diseases—arthritis
4. The neoplastic or cancerous illnesses

An obvious corollary to the concept of multiple casualties is that different diseases require different treatments.

D. D. Palmer, born in 1845 near Toronto, Ontario, spent the most productive years of his life in Davenport, Iowa, where the Palmer College of Chiropractic still is in existence. There are many biographies of this man, but the essential details set down here are taken from Dintenfass' book *Chiropractic: A Modern Way to Health*.

For ten years prior to his "discovery" of chiropractic, Palmer, a former fish-peddler and grocer, practiced magnetic healing. Ac-

cording to Dintenfass: "Mesmerism or 'magnetic healing' had many proponents. It was based on the discovery of 'animal magnetism' by Anton Mesmer. Although founded on unscientific premises 'magnetic healing' was in effect the first step toward current psychoanalytic and psychological methods."

On September 18, 1895, Palmer performed an experiment which blazed the trail for the development of a new healing profession which now has over 25,000 doctors of chiropractic throughout the world.

"On this day when Palmer was in his office in Davenport, in came Harvey Lillard the janitor, who was so deaf that he could not hear the noise of the wagons in the street or the ticking of a watch. Palmer inquired as to the cause of Lillard's deafness. Lillard explained that he had suddenly lost his hearing 17 years earlier when he exerted himself at his work in a cramped, stooping position. He said he felt something give way in his back and immediately lost his hearing.

"This interested Palmer, who upon examining Lillard's back, located a painful prominent vertebra which appeared out of place. Lillard verified this as the spot which hurt when he lost his hearing. Palmer reasoned that if the vertebra were replaced, the man's hearing might be restored. Using the spinous process of the vertebra as a lever, Palmer applied a sharp thrust which repositioned the bone; a short time later Lillard said that he could hear better than before."

It is worth noting that the "nerve of hearing," the acoustic nerve, is contained completely within the skull and has no connection with any of the spinal nerves which could be affected by a "sharp thrust" using the spinous process of the vertebra as a lever!

In any event the original hypothesis of Palmer that human disease is caused by "misalignment or subluxations of the bony articulations and adjacent structures, more especially those of the vertebra column and pelvis" and that by "proper adjustment to release the pressure on the nerves caused thereby, the

cause of the disease is removed and the body rendered capable of natural restoration to good health" and finally that "the chiropractic method of adjustment is purely manual and never resorts to drugs or surgery and is the antithesis of the germ theory" has been handed down virtually intact and unchanged over the past 70 years and forms the basis for modern chiropractic fully as completely as it did in 1895.

We are now concerned with a matter of truth, and two documented examples of patients treated by chiropractors will suffice as a basis for discussion. These cases have been chosen because the details are a matter of court record.

In 1951, a man was found to be suffering from tuberculosis. The condition remained dormant for ten years while the patient was under the care of a physician. In 1962, however, the tuberculosis became active again. Hospitalization and drug therapy were recommended but the patient refused and went to a chiropractor in New York State for treatment. The patient was treated without drugs and by diet for two years by two chiropractors working together. The patient died. The two chiropractors were convicted of manslaughter for having caused the death of the patient through culpable negligence.

In the second case a chiropractor undertook to treat the infected foot of a patient whom he knew to be suffering from diabetes; he advised against the use of insulin in the treatment of the diabetes. The infection spread and the patient died.

The Florida appellate court in finding that there was sufficient cause for the chiropractor to be indicted for manslaughter summarized its ruling in the following language: "If a person undertakes to cure those who search for health and who are, because of their plight, more or less susceptible of following the advice of anyone who claims the knowledge and means to heal, he cannot escape the consequences of his gross ignorance of accepted and established remedies

(Continued on Page 724)



*Well, Doctor, it's sort of
cross between a smoker's hack and a seal's bark.*

A wise mother who realizes there may be more to her child's cough than meets the ear
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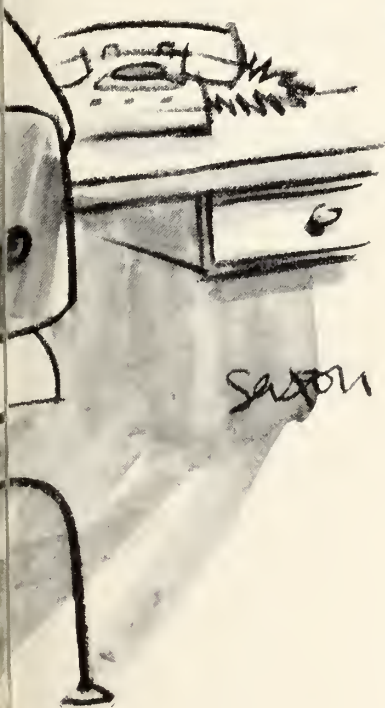
Each 5 ml. teaspoonful of Novahistine DH contains codeine phosphate, 10 mg. (Warning:
may be habit forming); phenylephrine hydrochloride, 10 mg.; chlorpheniramine maleate,
2 mg.; chloroform (approx.), 13.5 mg.; l-menthol, 1 mg. (Alcohol 5%). Each 5 ml. of
Novahistine Expectorant contains the above ingredients and, in addition, glyceryl
saccharate, 100 mg.

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MEDICINE AND CHIROPRACTIC

(Continued from Page 721)

and methods for the diseases which he knows his patients suffer and if his wrongful acts, positive or negative reach the degree of grossness he will be answerable to the State."

The chiropractor was tried and found guilty of manslaughter.

A quack was earlier defined as "one who fraudulently misrepresents his ability and experience in the diagnosis and treatment of disease or the effects to be achieved by the treatment he offers." At this juncture a simple but stern question awaits an answer: Who are the quacks? Are they the physicians in our society who believe that different diseases have different causes and require different methods of treatment including, where indicated the use of medicine and surgery? Or—are they individuals who believe that "most human ailments or disease are the results of a displacement of the vertebrae of the spinal column" (one cause) and that "by ascertainment of the subluxation of the spine and by proper adjustment to relieve the pressure on the nerves caused thereby the cause of the disease is removed," (one cure) are these the quacks? For the sake of the remainder of this discussion, I shall assume that it is the chiropractors who are the quacks.

If chiropractors are quacks, how can they be tolerated in this modern so-called scientific age and even more importantly how does it come about that chiropractic is given a certain stamp of approval by 48 of 50 state legislatures who have passed acts establishing boards of registration in chiropractic? A partial answer seems to lie in the facts that first, there is among the general public a profound ignorance of the scope of chiropractic and the character of the chiropractor. Second, there is an apathetic attitude on the part of those lay groups interested in stamping out heart disease, cancer, mental illness, etc., in regard to this problem. That they should have such an interest is indicated by the list of diseases which the chiropractor purports to be able to treat successfully and by the fact that in the case of cancer, delay

can be deadly. Finally, there is a distaste on the part of the average physician for engaging in an unpleasant controversy.

Examples of general ignorance are surprising indeed: The author had occasion to consult three prominent lawyers, one a past president of the Massachusetts Bar Association in reference to an attempt to counter the successful effort by the chiropractors to become licensed in Massachusetts. All three wondered what "the fuss was all about." One said that since chiropractors were essentially physiotherapists and practiced under the direction of physicians he felt that they deserve to be licensed! A prominent State Senator, a graduate of Harvard University, gave it as his opinion that licensing chiropractors would improve the practice of chiropractic. Would he have just as readily stated that the licensing of quacks would improve the practice of quackery?

As to the distaste for engaging in public controversy, when the author's views on chiropractic became a matter of public record, the following letter among others equally vituperative was received:

"I am certain the chiropractors will leave enough people for medics to kill even if they are licensed. A good chiropractic treatment would do you a world of good. But you medics would rather die so go your merry way,—but as long as I live I shall shout of your mistakes. Do you know that an educated chiropractor does not want to be a needle pusher, a prescription pusher or a knifer—they leave that to medics—who kill and sign the death certificates. What more do you want—well here is the answer—BLOOD."

On the other side of the chiropractic controversy we find a well-organized, well-financed group of determined men who are careful to avoid submission of the claims of chiropractic to impartial scientific analysis. J. R. Verner in collaboration with C. W. Weiant has written a book entitled *The Chiropractor Looks at Infection*. On page 21 there appears the following:

"There are six criteria by which to judge the value of a therapy and estimate the rela-

tive methods of differing therapies, namely:

Is it logical?

Is it effective?

Is it scientific?

Is it rational?

Is it peerless?

Is it infallible?"

These authors then make the claim that chiropractic is logical because it makes no unwarranted assumptions, it is effective because people go to chiropractors, it is scientific because it "depends on the data of anatomy, physiology, neurology and pathology in analyzing every case and it uses radiography and other scientific techniques in the examination of the patient." This last claim for chiropractic is comparable to stating that astrology is a scientific method for predicting the future because it uses certain data derived from astronomy!

These authors state further that chiropractic is rational "Because it is not content to be scientific." It is peerless because it thrives on the failures of other methods. They do admit that chiropractic is not infallible but that, of course, no other healing method can make that claim.

It is doubtful that these claims for the advantages of chiropractic would satisfy the critical faculties of the average high school student. However, the chiropractors through their chiropractic associations, have preferred to concentrate upon the political aspects of their problem and here they have been clever and successful. Through the payment of fairly substantial dues they have a well-financed propaganda machine which has continually stressed the theme stated by Weiant and Goldschmidt that "organized medicine seeks relentlessly to stifle the development of the younger art and chiropractic seeks to survive." In other words they have given an uninformed, somewhat gullible public the idea that the physicians for their own selfish reasons are trying to keep chiropractors from their legitimate goals of acting as

doctors in every sense of the word. They have turned this problem not into a search for truth versus non-truth but a struggle between two "healing professions."

What is the solution? No easy answer is available. Certainly public education is vitally necessary. It is also imperative that the ethics of the moral obligation of the informed citizen be strongly invoked. It would be wise to eliminate this struggle between the physicians and the chiropractors and to have chiropractic confronted with the strong opposition of lay medical groups interested in good medical care.

Finally we come to the second statement of Weiant and Goldschmidt quoted in the introduction to this essay: "The present direction of the conflict (between chiropractic and medicine) poses a serious threat to a basic human right; namely the right to a doctor of one's choice, the right to follow a course of action with respect to one's person which, according to one's lights, holds the greatest promise for health and well-being, including the right to make a mistake." How sacred is this right? What safeguards must surround this right to make a mistake? Does the general public have the right to make the mistake of indiscriminately ingesting LSD, heroin, morphine or cocaine? In reference to the choice of a doctor, it would seem reasonable to attempt to make certain that the public has access to all available information concerning the qualifications of the practitioners which they wish to consult. *Punch*, the English magazine which combines humor, satire and perceptive social insight had something to say on this subject as long ago as 1845.

"Great outcry has been raised of late, in the *Lancet* and other journals, against Quacks and Quackery. Let them not flatter themselves that it is possible to put either down. The Quack is a personage too essential to the comfort of a large class of society to be deprived of his vocation. He is, in fact, the Physician of the Fools—a body whose num-

bers and respectability are by far too great to admit of any thing of the kind. However, as there are some people in the world who are not fools, and who will not, when they want a doctor, have recourse to a Quack, if they can help it, the practice of the latter ought certainly to be limited to its proper sphere. For this end we could certainly go rather farther than Sir James Graham's sympathies permitted him to proceed last session. We would not only prevent him from assuming the title of a medical man, but we would oblige him to take that of Quack."

Perhaps with this advice from *Punch* we might make a beginning.

Award For Manuscripts

A competition for a \$250 award for the best manuscript submitted by a medical student, intern or resident on any subject pertinent to and concerning occupational health has been announced by the Central States Society of Industrial Medicine and Surgery. The contest closes at midnight on December 31, 1966.

A second competition, open only to residents in occupational medicine, is announced by the Industrial Medical Association. The award, consisting of an embossed scroll, will be presented at the Association's annual meeting to the author or authors of a paper published in the open literature on a subject germane to occupational medicine which is judged to be the most outstanding of those submitted. Reprints entered in the competition must be published during 1966 and submitted prior to January 15, 1967.

Both contests will be judged by members of the Committee on Merit in Authorship of the Industrial Medical Association. The criteria will be largely based on clarity, validity, objectivity, originality and style. Complete contest rules may be obtained from: Industrial Medical Association, 55 East Washington St., Chicago, Ill., 60602.

Overeating Is Problem

In an interdisciplinary congress held to define current and future problems in nutrition in the Western Hemisphere and to determine the roles of medicine, agriculture, and technology in their solution, malnutrition was cited as widely prevalent and of serious consequence. In the United States, obesity, atherosclerosis, and problems due to faulty dietary habits are of main concern. In the southern part of the hemisphere, the malnutrition involves a lack in proteins and total calories and affects, most seriously, children of preschool age, resulting in a high mortality rate in this age group. Survivors are marked for life, retarded in their physical development and possibly in their mental and psychological development as well. In many instances, efforts to increase food production are not keeping up with population growth, especially in those countries experiencing the most rapid growth and in undeveloped areas. There is also a large movement of populations from rural areas to cities. It is necessary, therefore, that either effective methods for control of population be applied or that the food supply be greatly increased and improved. To increase the food supply, better use must be made of existing technology, with more extensive use of fertilizers, selection of better breeds and strains of animals and plants, improvement of marketing procedures, transportation, etc. To be effective, such a program must be centered around the improvement and development of the entire community and adjusted to the community's economic capacity and educational level. The immediate need is for trained people at all levels of competence who are aware of the various aspects of these problems. However, the ultimate solution lies in the proper development and use of local food resources. (W. H. Sebrell, Jr., M. D.: "Population and food supply—implications in this hemisphere," *Proceedings of Western Hemisphere Nutrition Congress*, sponsored by the AMA Council on Foods and Nutrition, 1965)

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Brief Summary

Indications: Use Erythrocin-Sulfas in infections more susceptible to the combination than to either agent alone. These are usually found in urinary, lower respiratory tract, and chronic ear infections.

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or new born infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions: Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

If a reaction or overgrowth of nonsusceptible organisms occurs, withdraw the drug.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. each of sulfadiazine, sulfamerazine and sulfamethazine. 603303



Psychotics Need Help

Even today, the odd or eccentric student in college frequently is thought of as the potential genius and the scholarly thinker. One sees the withdrawn schizophrenic who spends almost all of his time studying, has little or no social contact, and experiences no difficulty in obtaining excellent grades in college. One also sees a large number who do poorly as students, and go from one school to another where psychiatric counsel is available at no cost. A study to test how worthwhile such therapy is and as a guide to counselors and psychiatrists in encouraging or supporting a schizophrenic's desire to go to college has been undertaken. This five-year study revealed that many of 108 psychotic students seen at a large midwestern university suffered from typical characteristics of mental illness. They lacked persistence, were uncertain about goals, and were dissatisfied with the curriculum. Indications are that three times as many psychotics drop out of college when compared to randomly selected patients without mental illness. More than twice the number of nonpsychotic students graduate as compared with the psychotic group. Since a large number of graduate students were seen with schizophrenic reactions, it was hypothesized that the schizophrenic college graduate may have difficulty in adjusting to the demands of society after graduation. Consequently, he returns to the academic environment as a safe haven. Although psychotic students represented only six per cent of the patients seen by the university's mental health division during a four-year period, they took up 20 to 30 per cent of the staff's time. It is hoped that as additional professional personnel become available, and a greater effort can be made toward more intensive therapy with the schizophrenic student, a higher degree of success may be achieved. (T. A. Kiersch, M. D., and A. G. Nikelly, Ph.D.: "The schizophrenic in college," *Archives of General Psychiatry*, July 1966)

Tattooing Covers Port-Wine Stain

Persons marked with port-wine stain (capillary hemangioma) can markedly improve their appearances by permanent camouflage through tattooing, two New York surgeons report.

Over the past 17 years, 735 patients have received a total of 3,200 treatments for port-wine stain of the head and neck. Satisfactory results were achieved in 85 per cent of those accepted for treatment. The remaining patients improved sufficiently so that problems of make-up were not as great as before.

Treatment consists of deposition of insoluble pigments in the dermis overlying the lesions (tattooing), thus camouflaging the florid, abnormal color, Drs. Herbert Conway and Robert E. Montroy of the New York Hospital-Cornell Medical Center explained.

Historically, the condition has failed to respond satisfactorily to commonly recommended methods of treatment, including radiation, use of carbon dioxide snow, and surgery. For this reason, many authorities state that the port-wine stain is best left alone. The authors disagree.

"Since port-wine stains do not grow after birth (they occupy the same percentage of surface area of the skin in adult life as at birth), and since there is no authentic case report of the malignant degeneration of such lesions, their single objectionable feature is the color," the surgeons said. "Thus, it seems logical to treat an abnormal color phenomenon by a color camouflage process."

The incidence of this congenital lesion is unknown, but the face is the most common site of involvement. Another common site is the posterior cervical region, the so-called nevus flammeus nuchae. In this location, the disfigurement is estimated to occur in 5 per cent of the population.

Treatment, basically, is a masking effect, the pigment being deposited in the skin deep

Brand or Generic—Let the Physician Decide

The generic name versus trade name has been and is one of those tiresome issues that never seems to get settled and is always good for a political "hoorah." As a physician, I have to prescribe drugs and my patients have to use and pay for them. Perhaps I have been too permissive, but I do not believe the cure is adoption of all generic names and federal control. I believe the problem is not all that complicated unless we prefer to make it so. Is it disrespectful to suggest that the decision should rest principally in the hands of the thoughtful physician? And you know there are some!—Irvine H. Page, MD, in *Modern Medicine*, (34:107), June 6, 1966.

The unusually high temperatures of a long, hot summer have been coincident with higher mortality in the Middle Atlantic and West North Central Divisions of the United States. A similar occurrence was noted in the Middle Atlantic States in 1964. The excess in mortality in relation to the heat wave is given as 245. (US Public Health Service: "Excess mortality related to heat wave," in *Morbidity and Mortality Weekly Report*, 23 July 1966)

in the dermis, superficial to the involved capillaries. Adults are treated following regional nerve blocks, small children under general anesthesia. In lesions extending into the scalp or eyebrow, treatment is applied without shaving the hair.

Patients are re-evaluated in one month for further treatment, which, if indicated, is carried out at that time. An average of five treatments usually is needed.

In conclusion, the investigators state: "The treatment offers the unfortunate bearer of the port-wine stain relief from deformity, a ticket to social anonymity, and psychological release from reaction of inferiority."—*New York State Jour. Med.*, Apr. 1, pp. 876-885.



The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—High on the list of health legislation to be considered by the new Congress convening Jan. 10 are proposals to amend both the medicare and medicaid programs.

Proposed medicare amendments would extend the program to the disabled, include podiatrists' services, add out-patient drugs to Plan B, and authorize that billing for for services of hospital-based physician specialists be put back under hospitals.

Sen. Russell B. Long, (D., La.), chairman of the Senate Finance Committee which handles medicare and medicaid legislation, is pushing a proposal designed to get physicians to prescribe drugs by generic terms for patients under federally-aided medical programs. Such an amendment died in a conference committee in the final days of the last Congress.

Amendments to limit federal expenditures under medicaid (Title XIX) are expected to get early consideration by the House Ways and Means Committee. The committee reached agreement on such legislation shortly before adjournment last year, but it was too late to get it through Congress.

One of the final pieces of legislation passed by Congress in 1966 authorizes liberalization of the Keogh law under which physicians get a tax break for savings put in qualified pension plans. The full amount of the \$2,500

annual maximum was made tax deductible. Only half of the amount was tax deductible under the original law.

Other health legislation approved by Congress in 1966 includes:

Group practice—authorizes federal mortgage guarantees for construction of non-profit group practice facilities.

Health services—authorizes the Office of Economic Opportunity (anti-poverty) to make grants for comprehensive health services programs, including birth control.

Public health—authorizes 1) \$145 million, one-year extension of PHS programs, including \$125 million for project grants for categorical programs. States and the PHS are given greater flexibility in spending the money among the various categories and including other "public health" projects; 2) extends the federal-aid vaccination program for three years; 3) provides for family health services for migratory workers.

Air pollution—authorizes a three-year, \$186 million extension of the federal anti-air pollution program and provides broader authority for air pollution control activities by localities.

Water pollution—authorizes a \$3.7 billion, four-year program for cleaning the nation's waterways. It includes initiation of a massive program for combatting pollution in major water basins.

Child care—prohibits sale of toys containing hazardous substances and strengthens existing law covering household hazardous substances; does not contain a disputed provision covering children's aspirin and other drug controls in the original legislation.

Narcotics—permits addicts charged with non-violent crimes to choose hospital commitment instead of trial, if the authorities agree, or could be sentenced after trial to hospitals for rehabilitation.

Packaging—requires that over-the-counter drugs and grocery products bear labels clear-

ly showing the contents, quantity, and manufacturer.

Mental health—amends original law to provide grants to assist in the establishment and initial operation of community mental health centers.

Research laboratory animals—provides for federal regulations covering transportation, purchase, sale, housing, care, handling and treatment of such animals.

Military medicare—amends existing law to provide for out-patient care in a physician's office and to include retired reservists and their dependents.

Allied health professions—authorizes \$105 million for a three-year program to train more medical technicians, therapists and other allied health workers.

* * *

The federal government has launched an extensive program to control and prevent alcoholism.

As initial steps, Health, Education and Welfare Director John W. Gardner established a National Center for the Prevention and Control of Alcoholism and appointed an 18-member National Advisory Committee on Alcoholism.

In announcing the program, Gardner stated its two major aims:

1) The immediate goal of making the best treatment and rehabilitation services available to those who need them now—through

both the stimulation of existing resources and the development of new manpower and facilities.

2) The long-range goal of developing effective, practical, and acceptable methods of preventing alcoholism and excessive drinking in all their destructive forms and developing improved therapeutic techniques.

Milton Silverman, special assistant to the HEW assistant secretary for Health and Scientific Affairs, was named coordinator of the program and executive secretary of the advisory committee.

The National Center, will be active in a number of major areas including: basic research, clinical research, education and prevention, consultation and training, and support of local programs.

"It will encourage and support alcohol research in universities and research centers and it will also conduct studies in its own laboratories," Gardner said. "It will not provide treatment for alcoholics, but will concentrate on the support of research, training, and control programs.

"We realize that a program of this kind cannot stand alone. It needs widespread public understanding and support. We will work with organizations and institutions already making great contributions to the prevention and control of alcoholism. Our objective, in brief, is to mobilize public and professional efforts on the scale necessary to overcome the blight of alcoholism."

ANNUAL SESSION

Jefferson Davis Hotel

Montgomery, Alabama

April 20, 21, 22, 1967



CALLED MEETING OF COUNSELLORS AND DELEGATES ATTRACTS BIGGEST CROWD IN MASA HISTORY

Attendance figures were shattered at the called meeting of the College of Counsellors and House of Delegates held Sunday, Nov. 6 at the Jefferson Davis Hotel in Montgomery.

Registration records indicated 174 Counsellors and Delegates were present at the meeting called by Dr. J. O. Finney of Gadsden, president of the Medical Association of the State of Alabama. In addition to the Counsellors and Delegates present, 25 Association members and 15 visitors also attended.

It was not only the best attended called meeting in history, but one of the most harmonious. Votes were taken on three important issues—all passed unanimously.

Approved without dissent were:

1. A new agreement with Blue Cross-Blue Shield of Alabama whereby the six physician members of the Board of Directors will have greater responsibilities and greater authority in the operation of the corporation; (see text of agreement on page 628).

2. Adopted a 15-point Statement of Position on the implementation of Title XIX in Alabama, including a firm statement that the

medical aspects of the program should be administered by the State Department of Public Health; (see text of Statement of Position on page 738).

3. Approved an increase in dues of the Medical Association from \$50 to \$75 a year.

The new agreement with Blue Cross-Blue Shield—an agreement which met all the demands made by MASA last April at the annual session—was announced in a joint statement by Dr. Robert Parker, chairman, Board of Censors, and H. F. Singleton, president of Blue Cross-Blue Shield of Alabama.

The agreement, in essence, gives physicians a louder voice in the conduct of the Blue Shield affairs of the corporation. Both Dr. Parker and Singleton stated that the beneficiary of this innovation would be the subscribers of Blue Cross-Blue Shield.

Singleton said it was proposed that the implementation of the agreement will be accomplished no later than Jan. 1, 1967.

Prior to the approval of this new agreement, the Counsellors and Delegates were given a detailed report on how it was reached

by Dr. Paul Burleson of Birmingham, and William Miller, executive vice-president of Blue Cross-Blue Shield.

Dr. Burleson was chairman of a three-man Ad Hoc Committee named last April at the annual session to work out an amicable settlement of the dispute with Blue Cross-Blue Shield. Serving with him were Dr. John Chenault of Decatur and Dr. Hugh Gray of Anniston.

Having resolved the Blue Cross-Blue Shield dispute, the Counsellors and Delegates then turned to the question of Title XIX and its implementation in Alabama.

Prior to the consideration of the Title XIX question the physicians were given an informative report of this program's implementation in New York state by Dr. Henry I. Fineberg, executive vice president of the Medical Society of the State of New York.

Dr. Fineberg, in a luncheon address, charged that Title XIX had been turned into a "political football" in his state, resulting in a fiasco which attracted national attention. He urged the Alabama physicians to make every effort to see that the same situation did not develop in Alabama.

Dr. J. Garber Galbraith of Birmingham, chairman of the Committee on the Aging and Indigent, submitted a report during the afternoon session on year-long conferences held with representatives of the Department of Pensions and Security concerning Title XIX in Alabama.

After explaining the far-reaching implications of the program on the medical profession, Dr. Galbraith submitted to the Counsellors and Delegates a 15-point Statement of Position, the key point being that since Title XIX was expressly designed as a health care program "the responsibility for administrative supervision of this program should be vested in the Alabama Department of Public Health."

The Statement of Position proposed that all medical aspects of the program be administered by medically-trained people. It was further proposed that the Department of

Pensions and Security have responsibility for the determination of eligibility under the program.

The Statement of Position was adopted without a dissenting vote.

The final item of business was the consideration of a \$25-a-year dues increase, effective Jan. 1, 1967. Dr. W. L. Smith, secretary-treasurer of MASA, gave a detailed report of the financial condition of the association which pinpointed the critical need of additional revenue.

His remarks were endorsed and strongly supported in statements by Dr. Robert Parker, chairman of the Board of Censors; Dr. Carl A. Grote, Jr., chairman, Committee on Public Relations and Economics; Dr. E. L. McCafferty, Jr., chairman, Committee on Legislation.

Several statements were made from the floor by counsellors and delegates—all in support of the increase. When Dr. J. O. Finney, MASA president, called for the vote it was unanimous.

After the increase had been approved, Dr. Smith presented a new budget for the calendar year 1967 which was swiftly adopted. He reported that the association would return to a calendar year fiscal operation effective Jan. 1, 1967, rather than the fiscal year.

Dr. Smith said the new budget included funds for retaining legal counsel for the Association, and would also allow a vastly stepped-up program in the areas of communications, public relations and legislation. Improvements will also be made to the Central Office building.

ANNUAL SESSION MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Jefferson Davis Hotel

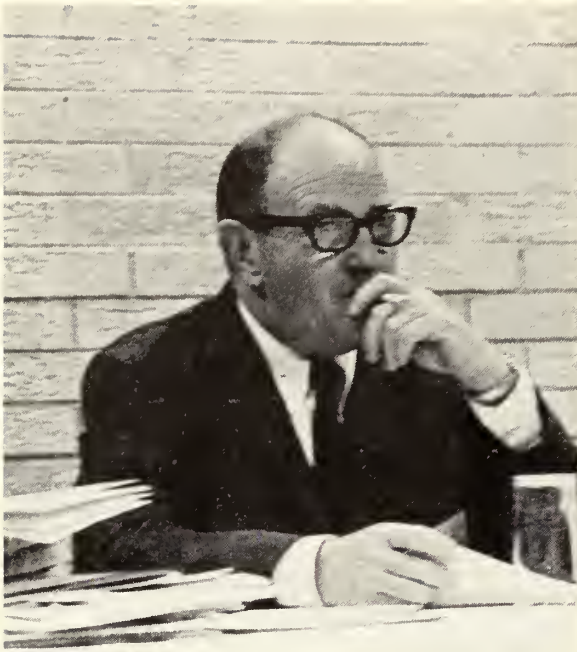
April 20-21-22, 1967

Montgomery, Alabama



The Called Meeting of the College of Counsellors and House of Delegates in Montgomery, Nov. 6 attracted a record attendance. Registration figures indicated that 174 Counsellors and Delegates were present for the meeting. Photo at top left shows Drs. E. B. Glenn of Birmingham and James G. Donald of Mobile—two past presidents of MASA—looking over the Association's Statement of Position on Title XIX. In the foreground at top right are Drs. M. Vaun Adams of Mobile, J. P. Collier of Tuscaloosa and Eric Strandell of Brewton during the business session. Bottom photo is an overall shot of the packed Jefferson Davis Hotel ballroom during the important meeting.





William F. Miller, executive vice president of Blue Cross-Blue Shield of Alabama, awaits his turn on the program of the called meeting to discuss the new insurance agreement.



Dr. Paul Burleson, Birmingham, chairman of the Ad Hoc Committee which worked out a new agreement with Blue Cross-Blue Shield, submits his report to the Counsellors and Delegates.



Dr. J. O. Finney, Gadsden, president of the Medical Association of the State of Alabama, presiding over the Nov. 6 called meeting of Counsellors and Delegates.



Drs. John Chenault of Decatur and A. F. Toole of Talladega listen attentively as the new agreement with Blue Cross-Blue Shield is outlined at the called meeting.

Announcing...

THE THIRTIETH ANNUAL MEETING

of

The New Orleans Graduate Medical Assembly

Conference Headquarters—Roosevelt Hotel

MARCH 6, 7, 8, 9, 1967

Guest Speakers

- John Steinhaus, M. D., Atlanta, Ga.
Anesthesiology
- H. R. Reichman, M. D., Salt Lake City, Utah
Colon and Rectal Surgery
- Rees B. Rees, M. D., San Francisco, Calif.
Dermatology
- Jose M. de la Vega, M. D., Mexico, D. F.
Gastroenterology
- Nicholas J. Pisacano, M. D., Lexington, Ky.
General Practice
- Gordon W. Douglas, M. D., New York, N. Y.
Gynecology
- Robert C. Hartmann, M. D., Nashville, Tenn.
Internal Medicine
- C. Thorpe Ray, M. D., Columbia, Mo.
Internal Medicine
- A. Earl Walker, M. D., Baltimore, Md.
Neurological Surgery
- Humbert L. Riva, M. D., East Orange, N. J.
Obstetrics
- Arthur H. Keeney, M. D., Philadelphia, Pa.
Ophthalmology
- Robert W. Bailey, M. D., Ann Arbor, Mich.
Orthopedic Surgery
- John J. Conley, M. D., New York, N. Y.
Otorhinolaryngology
- F. William Sunderman, M. D., Philadelphia, Pa.
Pathology
- Alexander J. Schaffer, M. D., Baltimore, Md.
Pediatrics
- Henry J. Woloshin, M. D., Philadelphia, Pa.
Radiology
- Curtis Artz, M. D., Charleston, S. C.
Surgery
- Richard T. Shackelford, M. D., Baltimore, Md.
Surgery
- John T. Grayhack, M. D., Chicago, Ill.
Urology

Lectures, symposia, clinicopathologic conferences, round-table luncheons, medical motion pictures, technical exhibits and entertainment for visiting wives. (All-inclusive registration fee—\$25.00).

This program is acceptable for thirty and one-half (30½) accredited hours by the American Academy of General Practice.

For information concerning the Assembly meeting write Secretary, The New Orleans Graduate Medical Assembly, Room 1528, 1430 Tulane Avenue, New Orleans, Louisiana 70112.

Cycle Injuries

Motorcycles are enjoying an unprecedented surge in popularity—some 3 million Americans are now zooming around on these light-weight machines. One result has been “an alarming number” of injuries, according to a recent Minneapolis study.

Dr. Ramon B. Gustilo and his associates reported on 200 accident victims who were treated in two Minneapolis hospitals during the three and one-half month period from May 1 through August 15, 1964.

An analysis showed males to be involved four times as frequently as females. Ages ranged from three to 52 years, with the majority in the 15- to 25-year-old group. Twenty-four of the injured had been passengers at the time of the accident.

It was noteworthy that the majority of accident victims were novices: 20 per cent were riding the motorcycle for the first or second time; 70 per cent had rented or borrowed the cycle. All but six of the cyclists rode such popular light-weight models as the Honda, Vespa, Yamaha, and the like.

There were 119 minor injuries, which did not require hospitalization, and 72 major injuries. Major injuries included fractures, amputations, large lacerations, cerebral concussions and intra-abdominal injuries, requiring either hospitalization or surgery. Two patients died as a result of their injuries.

Forty-six accidents (38.4%) were car-motor collisions; 79 (61.6%) were upsets from various causes.

“The number of accidents due to upset of the machine points to the fact that it is basically an unstable vehicle,” the authors said. “The popular light-weight machines are most frequently involved in accidents, a fact which may well be due to the inexperience of the driver as well as to the excessive speed and power of these machines in relation to their weight.”

In conclusion: “It would be prudent to insist that drivers of motorcycles receive special instruction and demonstrate proficiency in the use of these machines before venturing onto our highways and city streets.”—*Minnesota Med.*, April, pp. 489-491.

STATEMENT OF POSITION IN REGARD TO TITLE XIX—PUBLIC LAW 89-97

Preamble

Public Law 89-97, the Social Security Amendments of 1965, adds two new Titles to the Social Security Act. In addition to the better-known Title XVIII, Health Insurance for the Aged, the law inaugurates Title XIX, Grants to the States for Medical Assistance Programs.

Five Public Assistance Titles of the Social Security Act now authorize federal-state grant-in-aid programs for the needy; Title I—*Old Age Assistance and Medical Assistance for the Aged*; Title IV—*Aid and Services to Needy Families with Children*; Title X—*Aid to the Blind*; Title XIV—*Aid to the Aged, Blind, or Disabled, or for Such Aid and Medical Assistance for the Aged*, with which a state may replace Titles I, X, and XIV.

These are independent programs, with different formulas for determining the federal share of expenditures. Each may be administered, at the state level, by a different agency; each may use different criteria to determine who is eligible for assistance.

The programs may, and frequently do differ in medical care provided. This is partly a result of the different matching formulas. In Medical Assistance for the Aged, only medical expenditures receive federal reimbursement. In Old Age Assistance and Aid to the Aged, Blind, or Disabled, a state can receive more federal reimbursement if part of its expenditures are for medical care than if all go for cash grants to the needy. In Aid and Services to Needy Families with Children, Aid to the Blind, and Aid to the Permanently and Totally Disabled, federal matching is the same whether the money is spent for medical care or cash grants.

The result is great diversity in medical care for the needy, even within a single state. Title XIX seeks to eliminate this diversity, establishing a single program which makes the same medical care available to all a state's needy and medically needy.

The program became effective January 1, 1966, and is optional with the states. However, after 1969, no federal matching funds for medical care of the needy will be available through other assistance programs. By 1975, all needy and medically needy, of all ages, are to have comprehensive care and services available through this program.

The states may administer the program through the agencies of their choice. Each

state can set its own eligibility standard to determine need for assistance, but may not establish income ceilings or residence requirements. Medical personnel will be required in the state agency and at the local level to administer the program.

The federal share of the cost will range from 50 to 83 per cent, with the highest matching to lowest-income states. Alabama's matching ratio is the highest: 83 per cent Federal; 17 per cent State. There is no ceiling on the amount of federal reimbursement.

Until passage of Public Law 89-97, federal law mandated administrative responsibility for medical care for the medically indigent to state and local welfare agencies. This situation is now changed and states are provided an option to designate the agency best prepared to administer the medical assistance program under Title XIX. The Medical Association of the State of Alabama believes that the Department of Public Health is the agency best qualified to administer Title XIX on the basis of its experience in supervising the Kerr-Mills program and its intimate knowledge of the health situation in Alabama today. Similarly, we believe that the Department of Pensions and Security is best qualified to handle those aspects of the program which deal with social services.

The scope and complexity of Title XIX demands that every agency and association involved in formulating this program shall enter into the task in an atmosphere of mutual confidence and respect in determination that the results achieved shall serve the best interests of the patients without inflicting damage upon the providers of service.

Title XIX provides the framework for comprehensive health services for a large segment of the State's population. Essential to the provision of comprehensive medical care is the precept that the physician must act as chief of the team in the expanding health care programs.

The medical profession assumed responsibility for many years, through the role of the family physician, for the co-ordination of medical and welfare services to the best benefit of patients. With the trend to specialization encompassing a majority of all physicians, the profession more or less relinquished this role in practice if not in theory. Title XIX provides a unique opportunity for phy-

sicians to again assume leadership for the co-ordination of comprehensive medical and welfare services.

Health legislation passed by the 89th Congress leaves no doubt that federal government has embarked upon a plan that will eventually provide comprehensive health services to every person in this country. There is a definite indication that in providing comprehensive health services geographic and political lines will be crossed. Organization for provision of services will range from neighborhood centers to regional centers. Federal grants will be available to various state and voluntary agencies to aid in the planning and development of such centers.

It has been estimated that Title XIX and subsequent federal legislation could constitute 40 per cent of the practice of medicine in Alabama. On January 26, 1966, Dr. J. Garber Galbraith, Chairman of the Committee on Aging and the Indigent, wrote to Dr. James G. Donald, then serving as President of the Medical Association of the State of Alabama, the following:

"Basically, Titles XVIII and XIX pertain to

medical care, consequently the Health Department and medical profession are essential to the implementation of these programs. I strongly feel that we should therefore insist on a leading voice in the planning and policy determinations with regard to Title XVIII and XIX of the 1965 Social Security amendments.

"Since Title XIX is a program for medical care, the Medical Association of the State of Alabama should concern itself intimately with the formulation of the State plan. Especially, we should not await the development of a plan by some other State agency which might possibly be contrary to our interests, thus putting us in a negative position of criticism without a positive program."

Unless the Medical Association of the State of Alabama acts immediately to solve this problem, there is the possibility that some other department of the State government will establish its own department of medical services, thus weakening the rightful role of the Department of Public Health in administering the health programs for the people of Alabama.

Statement Of Position

Therefore, in view of the facts stated above, the Medical Association of the State of Alabama acting through its duly constituted College of Counsellors and House of Delegates assembled in Montgomery, on the 6th day of November, 1966 does hereby adopt this Statement of Policy and calls upon the Governor and the Legislature of this state to enact the following principles into law:

PRINCIPLE 1—Inasmuch as Title XIX is designed expressly to render comprehensive health care to the aged, the blind, the disabled, the indigent, and the medically indigent of this state, the responsibility for administrative supervision of this program shall be vested in the Alabama Department of Public Health.

PRINCIPLE 2—That responsibility for determination of eligibility shall be vested in the Alabama Department of Pensions and Security.

PRINCIPLE 3—That the Department of Public Health shall be authorized to contract with other subdivisions of state government to continue those programs encompassed within the provisions of Title XIX which they are now administering, viz:

- a. The Department of Pensions and Security shall continue to direct programs of aid to the blind, aid to families with

dependent children, and aid to the totally and permanently disabled in all respects except those pertaining to medical care;

- b. The Department of Education shall direct all programs relating to crippled children and rehabilitation in all respects except medical care;
- c. The Department of Mental Health shall formulate and direct all programs dealing with the mentally ill and retarded whether inpatient or outpatient except in those areas concerned with medical care.

PRINCIPLE 4—That no recipient shall be paid from Title XIX funds for physician services except under programs approved and supervised by the Department of Public Health.

PRINCIPLE 5—That any legislation designed to implement the Title XIX program in Alabama shall include provisions that:

- a. Patients shall have free choice of physician or institution;
- b. There shall be no interference in the practice of medicine by any official of the state or federal government;
- c. There shall be no limitation on drugs, appliances or services prescribed by a

physician unless dictated by financial considerations.

- d. There shall be no requirement for prior authorization to extend medical services or to admit a patient to a hospital or other institution.

PRINCIPLE 6—That the Department of Public Health shall be responsible for establishing and maintaining standards for private or public institutions in which recipients of medical assistance under Title XIX may receive care or services.

PRINCIPLE 7—That adequate funds shall be appropriated to the Department of Public Health, to the Department of Pensions and Security, to the Department of Education, and to the Department of Mental Health, for efficient administration of their duties.

PRINCIPLE 8—That the county or multi-county departments of health shall be the local administering agency for supervision of all phases of medical care under the Title XIX program.

PRINCIPLE 9—That the law shall require designation of a fiscal intermediary which shall be responsible for making payments to recipients and providers of services.

PRINCIPLE 10—That the law shall specify the payment of usual and customary fees for physician services or ancillary health care as the basis for any fee schedule imposed for medical care and that payments for laboratory, hospital, extended care, or other institutional services, shall be determined with

the consent of the providers of those services.

PRINCIPLE 11—That there shall be created a statutory committee composed of representatives of every provider of services, which committee shall have a determining voice in the formulation of rules and regulations governing providers of services.

PRINCIPLE 12—That suitable legislation shall be drafted and presented to each subdivision of the state government or association representing providers of service at a convention to be called no later than February 15, 1967, and this Association strongly urges that no subdivision of the state government or any association representing providers of services take unilateral action to propose enactment of Title XIX legislation without consultation with all other providers of services.

PRINCIPLE 13—That each provider of services shall assume responsibility to obtain adequate financing of the Title XIX program.

PRINCIPLE 14—It is recommended that county governing bodies shall be given an opportunity to transfer that portion of their funds annually appropriated for care of charity patients into a central fund to be used for matching purposes.

PRINCIPLE 15—That nothing in the state law implementing Title XIX shall be construed as depriving the physician of his right to bill the patient directly or accepting assignments through the fiscal intermediary.

Definition of Medical Assistance Under Title XIX

"Medical Assistance" means payment of part or all of the cost of the following care and services (if provided in or after the third month before the month in which the recipient makes his application) for individuals who are (a) under the age of 21; (b) relatives with whom a child is living if the child, except for being under the age of 18 or under age 21 and a student, is or would be, if needy, a dependent child under the program of Aid to Families with Dependent Children; (c) 65 years of age or older; (d) blind; or (e) 18 years of age or older and permanently and totally disabled; but whose income and resources are insufficient to meet all the cost of:

(1) inpatient hospital services (other than services in an institution for tuberculosis or mental diseases);

(2) outpatient hospital services;

(3) other laboratory and X-ray services;

(4) skilled nursing home services (other than services in an institution for tuberculosis or mental diseases) for individuals aged 21 or over.

(5) physicians' services, wherever provided;

(6) medical care or any other type of remedial care recognized under state law furnished by licensed practitioners within the scope of their practice as defined by state law;

(7) home health care services;

(8) private-duty nursing services;

(9) clinic services;

(10) dental services;

(11) physical therapy and related services;

(12) prescribed drugs, eyeglasses, dentures, and prosthetic devices;

(13) other diagnostic, screening, preventive, and rehabilitative services;

(14) inpatient hospital services and skilled nursing home services for individuals 65 or over in an institution for tuberculosis or mental diseases; and

(15) any other medical or remedial care recognized under state law specified by the Secretary of HEW.



around the state

Dr. Frank Moody, Noted Gastrointestinal Surgeon, Joins Faculty Of University Medical College

Dr. Frank G. Moody, one of three distinguished scientists spoke at the scientific session of the dedication of the Lyons-Harrison Research Building, University of Alabama in Birmingham. Dr. Moody will join the Medical College of Alabama as associate professor of Surgery and chief of the Division of Gastrointestinal Surgery. Dr. Moody, who has been assistant professor of surgery at the University of California Medical Center in San Francisco, assumed duties at the Medical Center in Birmingham in November.

In announcing the appointment, Dr. John Kirklin, professor and chairman of the Department of Surgery, said, "Dr. Moody is one of the outstanding individuals in the country in the field of gastrointestinal surgery. His research experience, his training and ability as a clinical surgeon, and his obvious interest in undergraduate and graduate education eminently qualify him for this position."

Dr. Moody's appointment marks the establishment of a new division in the Department of Surgery. Gastrointestinal surgery, which pertains to the stomach, intestines, gall bladder, liver and pancreas, continues to be a part of general surgery, but will receive special attention and emphasis by the establishment of this division.

Dr. Moody is a graduate of Dartmouth College and Cornell University Medical College. He is a member of Phi Beta Kappa. He interned and took a surgical residency at Cornell University Medical Center, and in 1963, began a research fellowship at the Cardiovascular Research Institute, University of California Medical Center in San Francisco. He has subsequently held appointments there as clinical instructor in surgery and assistant professor of surgery.

A native of Franklin, New Hampshire, Dr. Moody served with the United States Army from 1946-48, and from 1950-51. He is a diplomate of the National Board of Medical Examiners and of the American Board of Surgery.

The Dedication of the Lyons-Harrison Building, which also celebrated the tenth anniversary of the Health Research Facilities Act, was held in the auditorium of the Engineering Building. Speaking at the scientific session were Dr. Moody, Dr. Bengt Gustafsson of Stockholm, Sweden, and Dr. Joseph Gibilisco of the Mayo Clinic in Rochester.

Senator Lister Hill made the principal address at the dedication.

COUNTY SOCIETIES MEET

BALDWIN COUNTY

The Medical Society of Baldwin County met on October 4 at the Thunderbird Inn with Dr. Percy Bryant, president, presiding. Ten members attended the meeting.

Dr. L. S. McGee of Mobile was the featured speaker. His subject, Cardiac Pacer-maker in Treatment of Heart Block.

A business meeting followed the scientific session.

The next meeting of the Baldwin County Medical Society will be held in November when officers for 1967 will be elected.

HOUSTON COUNTY

Houston County Medical Society met on October 14 at the Elk's Club in Dothan, Alabama. Dr. Manley Cummins, president, presided. More than 140 people attended the dinner including physicians, ministers, and their wives. Theme of the meeting was Medicine and Religion.

Dr. Paul McCleave, director of the Division of Medicine and Religion, AMA, spoke on "Paradoxes in Modern Medicine."

Dr. Cecil Sanders was in charge of the meeting.

Inhalation of Fumes Deadly

Vaporizer-type bug killers are "dangerous devices," and are condemned for use in and about the home by the American Medical Association, the U. S. Public Health Service and other government agencies. The apparatus, sold under various brand names, controls insects by electrically vaporizing insecticide tablets and thus spreads poisonous fumes. The Lincoln-Lancaster (Neb.) County Board of Health recently issued a warning to potential users of these devices, following the death of a Lincoln child due to inhalation of the fumes.—*Nebraska S. Med. J.*, April, p. 123.

OBITUARIES

DR. FRANK POND PHILLIPS

Dr. Frank Pond Phillips of Mobile died suddenly Oct. 23 at the age of 37.

Dr. Phillips, a prominent radiologist, died of a heart attack while eating breakfast at his home.

A native of Mobile, Dr. Phillips was a 1954 graduate of the University of Alabama Medical College. He interned at St. Vincent's Hospital and did his residency at University Hospital. He served for two years as a captain in the U. S. Army Medical Corps.

Dr. Phillips was on the radiological staff at Doctors Hospital in Mobile and Suburban Hospital, Saraland.

He is survived by his wife, Mrs. Nina Phillips; one daughter, Susan; his parents and two brothers.

* * *

DR. WILLIAM JAMES MOODY

Dr. William James Moody of Rt. 1, Satsuma, died Oct. 21 in a Gadsden hospital at the age of 37.

Dr. Moody was born in Tuscumbia, received his pre-medical education at Florence State College and was graduated from the University of Tennessee Medical College in 1956. He interned at County Hospital, Mobile.

He entered the general practice in Birmingham in 1959 but the following year moved to Satsuma where he remained until his death. He was on the staff of Suburban Hospital, Saraland, and Mobile Hospitals.

Dr. Moody is survived by his wife, Mrs. Virginia Moody; two sons, Tommy and Stan Moody, and one daughter, Ginger Moody.

what time is it?

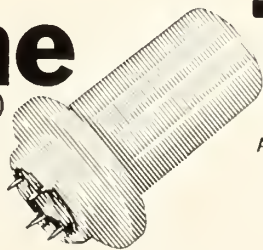
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Cryptenamine 1.0 mg.* Methyclothiazide 2.5 mg. Reserpine 0.1 mg.

When blood pressure won't stay down despite initial therapy — when complaints of headache, fatigue or dizziness are often voiced — it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine *plus* cryptenamine — a rational, comprehensive therapy to help establish and maintain early, more decisive control of blood pressure.

The cryptenamine in DIUTENSEN-R helps improve normal vasodilating reflexes while the thiazide and reserpine components maintain vasorelaxant, sedative, and saluretic benefits. Cryptenamine lowers pressoreceptor reflex thresholds (which may be abnormally high in hypertension) — “resets” pressoreceptors to function at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

“... quite apart from the problem of vascular damage, there arises a possibility of virtual ‘cure’ or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive.”

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice* 1966-67, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals.

However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars. **Side effects and**

precautions: The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout symptoms and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon.

DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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MEETING OF AMERICAN COLLEGE OF CARDIOLOGY SCHEDULED IN WASHINGTON, FEB. 15-19

The American College of Cardiology will hold its 16th Annual Session Feb. 15-19, 1967 in Washington, D. C. The five days of scientific presentations on research and clinical advances will be held at the Washington Hilton Hotel.

Highlights of the session will include a panel discussion on "Controversies in Cardiology" and a symposium on space medicine. The controversies panel of national authorities will present opposing views on such topical subjects as revascularization of the heart, prophylactic digitalization, long-acting nitrites and polarizing solutions.

The space medicine symposium will focus on cardiovascular problems affecting both astronauts and aquanauts and presentations by scientists on the effects of prolonged deep sea and outer space travel on the heart and blood vessels.

Other scientific features will include individual participations in demonstrations of electrocardiographic and computer diagnoses of heart disease.

The session will be a gathering place for national and international scientists and clinicians in the field of cardiovascular diseases. On Wednesday evening, Feb. 15, noted scientists from England, South Africa and other countries will present short papers on "Contributions of International Cardiology."

The College will present its annual Young Investigators' Awards totaling more than \$2,000 during the meeting to outstanding young cardiologists who present their research papers there.

The College's 16th Annual Convocation will be held during the session to induct new Fellows of the College.

Other features of the session will include more than 50 luncheon panels and fireside

conferences. Scientific clinics and demonstrations will be held at most of Washington's university medical centers and at Federal hospitals and institutes. Complementing the session will be more than 150 technical and scientific exhibits.

General Chairman is Brig. Gen. Archie A. Hoffman, MC, U. S. A. F., Washington, D. C., Commander, U. S. A. F. Hospital, Andrews Air Force Base. Alfred Soffer, M. D., Chicago, Ill., a Senior Editor of the *Journal of the American Medical Association*, is Chairman of the Scientific Program Committee.

CALENDAR LISTING

The American College of Cardiology, Annual Session, Feb. 15-19, 1967, Washington Hilton Hotel, Washington, D. C. INFO: William D. Nelligan, Executive Director, American College of Cardiology, 9650 Rockville Pike, Washington, D. C. 20014.



"Mr. Filbanks, we've located a volunteer doctor."

Reprinted from "The New Physician."

BENEFITS PAID BY HEALTH INSURANCE COMPANIES MAY SET ALL-TIME RECORD DURING 1966

Health insurance benefits paid by insurance companies were 11.5 per cent higher during the first six months of the year than during the same period in 1965, the Health Insurance Institute reported today.

According to the Institute, insurance companies paid \$2,879,741,000 to insured persons through June 30th, an increase of more than \$296.5 million over 1965's first half total.

On the basis of these figures, the Institute projected a record year for 1966 in total health insurance benefits paid to insured persons by the nation's insurance companies.

A total of \$5.2 billion in health insurance benefits were distributed during all of 1965 by insurance companies.

At the close of 1965 there were more than 156 million Americans protected by some form of health insurance, the Institute reported, including 97 million persons protected by insurance companies.

Thus far in 1966 benefit payments by insurance companies are running ahead of last year for all five types of health insurance: hospital expenses, surgical expenses, physicians' expense, major medical expense, and loss-of-income.

Hospital expense insurance accounted for the largest amount of benefits paid. Insurance companies paid approximately \$1.2 billion to persons covered by these policies in the first half of 1966, up 10.7 per cent over the nearly \$1.1 billion paid out in the first half of 1965.

Surgical expense insurance accounted for \$342 million, up 8.3 per cent over the \$316 million paid in the first half of 1965.

Half-year benefits paid for non-surgical physicians' expenses rose 14.8 per cent, from \$101 million to more than \$116 million.

Major medical, which pays benefits ranging from \$10,000 to \$20,000 or more to offset the

costs of serious illness, accounted for almost \$647 million in benefits paid in the first half of the year, an increase of 17.8 per cent over the \$549 million paid during the comparable period last year.

Loss of income payments, excluding accidental death and dismemberment benefits, amounted to more than \$560 million during the first six months, a rise of 7.7 per cent over the previous year's six-month figure of \$520 million.

Reprinted from the September issue of Health Insurance News.

Meal Research Continues

Research on whether three large meals daily with long time intervals between are more healthful than frequent small meals has not yet changed the American meal pattern. However, continuing observations of the population and volunteer groups suggest that intake of large meals, widely spaced, tends to promote fat deposition and overweight. Recently a one-year study was reported on the effect of frequency of dietary intake on the body composition of 226 children and adolescents in three boarding schools which served three, five, or seven meals per day, respectively. Findings were as follows: in the school serving three meals per day, there was a greater tendency among older children (boys 11 to 16 years of age and girls 10 to 16 years of age) to form and deposit fat reserves than among similar children given five or seven meals per day, with smaller portions at each meal. No significant differences could be found between frequency of meals and body composition in the younger children (boys 6 to 11 years of age and girls 6 to 11 years of age). (P. Fabry, M. D., et al: "Effect of meal frequency in school children," *American Journal of Clinical Nutrition*, May 1966)

MINIMAL BRAIN DYSFUNCTION SUBJECT OF STUDY

Minimal brain dysfunction—a condition which may be seriously handicapping the learning process of millions of American children—was examined in depth at the annual convention of the National Society for Crippled Children and Adults, Nov. 10-13 at Pittsburgh.

Minimal brain dysfunction (MBD) has only recently been recognized as a serious handicap to many children. It may cause an apparently healthy and intelligent child to react abnormally in certain situations, or cause another to have difficulty learning to read, write or do arithmetic.

A recent study sponsored jointly by the National Society and the National Institute for Neurological Diseases and Blindness, indicated that MBD is more widespread than previously believed, and called for a comprehensive program to expand knowledge about the problem and methods for diagnosis and treatment.

At the Pittsburgh meeting, a special symposium Nov. 12 brought four outstanding health and education authorities together to discuss MBD and its implications.

Richard Masland, M. D., offered a general description of MBD in a talk titled "The Nature of the Problem." Dr. Masland is director, National Institute of Neurological Diseases and Blindness, U. S. Public Health Service, Washington, D. C.

The challenge which MBD presents to education was the subject of Morvin A. Wirtz, Ed. D., deputy assistant commissioner, Office of Disadvantaged and Handicapped, U. S. Office of Education, Washington.

The mental processes of learning disability was discussed by A. Jean Ayres, Ph. D., who is a visiting associate professor, Department of Exceptional Children, University of Southern California, Los Angeles.

Elizabeth Freidus, of the Special Education Department, Teachers College, Columbia Uni-

versity, New York, talked on "Classroom Applications of What We Have Learned About Minimal Brain Dysfunction."

The afternoon symposium was co-sponsored by Western Pennsylvania Chapter #104 (of the Pennsylvania Society for Crippled Children and Adults) and the Pennsylvania Federation of Council for Exceptional Children.

Zinc Speeds Healing

Once upon a time, it was usual to speak of the essential mineral elements—copper, iron, fluorine, manganese, zinc, cobalt, molybdenum, iodine, and selenium—as the trace elements because such small amounts of each are needed for normal body functions. The terms *trace element* and *trace mineral* go back to the time when the analytical methods available were not sensitive enough to measure the small amounts in animal tissues. More generally used today is the term *micronutrient*, which nicely categorizes these chemicals as minute but useful in nutrition. Although the story of our need for iron, copper, cobalt, and other micronutrient minerals has been told frequently, less has been said about the role of zinc in nutrition. Its place as an essential nutrient for plants and animals has been recognized since 1869. Later studies established the mineral element as a constituent of essential enzymes, intimately concerned with formation of protein in the body. Current research reveals that nutritional zinc deficiency occurs in some human beings where consumption of animal protein is very low. An interesting aspect of current biochemical studies concerns the effect of this mineral on wound healing. Work at the University of Rochester reveals that zinc has a potent effect on acceleration of healing in surgically produced wounds. (R. W. Luecke, Ph.D.: "The significance of zinc in nutrition," *Borden's Review of Nutrition Research*, October-December 1965)

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BUREAU OF VITAL STATISTICS

PROVISIONAL BIRTH AND DEATH STATISTICS AND COMPARATIVE DATA

Ralph W. Roberts, M. S., Director

AUGUST 1966

Live Births Deaths Causes of Death	Number Registered During August 1966			Rates* (Annual Basis)		
	Total	White	Non- White	1966	1965	1964
Live Births	6,052	3,874	2,178	20.2	21.3	24.8
Deaths	2,637	1,714	923	8.8	8.4	8.4
Fetal Deaths	99	51	48	16.1	21.9	23.7
Infant Deaths						
under one month	141	77	64	23.3	22.5	17.9
under one year	173	89	84	28.6	26.0	25.2
Maternal Deaths	3		3	4.9	4.6	4.1
Causes of Death						
Tuberculosis, 001-019	22	6	16	7.4	7.8	8.7
Syphilis, 020-029	3	1	2	1.0	1.4	1.7
Dysentery, 045-048						0.7
Diphtheria, 055						0.3
Whooping cough, 056						0.3
Meningococcal infec- tions, 057	1	1		0.3	0.3	0.3
Poliomyelitis, 080, 081						
Measles, 085	2	2		0.7	0.7	
Malignant neoplasms, 140-205	366	265	101	122.4	119.4	123.8
Diabetes mellitus, 260	48	23	25	16.0	16.6	11.4
Pellagra, 281						
Vascular lesions of central nervous sys- tem, 330-334	382	237	145	127.7	110.6	120.0
Rheumatic fever, 400-402	1	1		0.3		
Diseases of the heart, 410-443	858	593	265	286.9	263.2	260.4
Hypertension with heart disease, 440-443	107	37	70	35.8	32.5	36.8
Diseases of the arteries, 450-456	61	42	19	20.4	20.0	20.5
Influenza, 480-483						0.3
Pneumonia, all forms, 490-493	44	25	19	14.7	18.9	16.3
Bronchitis, 500-502	3	3		1.0	1.4	2.4
Appendicitis, 550-553	2	2		0.7	0.3	1.7
Intestinal obstruction and hernia, 560, 561, 570	13	11	2	4.3	4.4	4.5
Gastro-enteritis and colitis, under 2, 571.0, 764	9	2	7	3.0	0.3	3.8
Cirrhosis of liver, 581	28	21	7	9.4	6.1	6.6
Diseases of pregnancy and childbirth, 640-689	3		3	4.9	4.6	4.1
Congenital malforma- tions, 750-759	36	23	13	5.9	5.4	4.6
Immaturity at birth, 774-776	46	23	23	7.6	6.7	5.2
Accidents, total, 800-962	199	143	56	66.5	72.4	62.8
Motor vehicle acci- dents, 810-835, 960	100	75	25	33.4	39.2	31.9
All other defined causes	386	234	152	129.1	107.2	120.0
Ill-defined and un- known causes, 780- 793, 795	124	56	68	41.5	61.6	50.3

*Rates: Birth and death—per 1,000 population

Infant deaths—per 1,000 live births

Fetal deaths—per 1,000 deliveries

Maternal deaths—per 10,000 deliveries

Deaths from specified causes—per 100,000 population

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director

Current Morbidity Statistics

1966

*E. E.

	Sept.	Oct.	Oct.
Tuberculosis	71	108	139
Syphilis	141	133	125
Gonorrhea	430	334	350
Chaneroid	2	1	1
Typhoid fever	0	0	2
Undulant fever	0	1	0
Amebic dysentery	2	2	4
Scarlet fever & strep. throat	376	610	69
Diphtheria	0	1	6
Whooping cough	1	2	12
Meningitis	16	6	5
Tularemia	0	0	0
Tetanus	0	1	1
Poliomyelitis	0	0	4
Encephalitis	0	0	0
Smallpox	0	0	0
Measles	9	26	23
Chickenpox	2	2	3
Mumps	22	16	17
Infectious hepatitis	16	38	56
Typhus fever	0	0	1
Malaria	3	0	0
Cancer	600	828	647
Pellagra	0	0	0
Rheumatic fever	13	26	15
Rheumatic heart	19	21	24
Influenza	23	137	31
Pneumonia	141	153	143
Rabies—Human cases	0	0	0
Pos. animal heads	3	4	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph. D., Director

October 1966

Examination for Intestinal Parasites	1,319
Examination for Malaria	1
Salmonella & Shigella (Blood-feces-urine-food)	318
Examination for tubercle bacilli	3,596
Examination for gonococci	828
Serological test for syphilis	18,927
FTA	18
Darkfield	2
Brucella	1
General Bacteriology (cultures for isolation and confirmation)	14
Staphylococcus (cultures for isolation and confirmation)	291
Examinations for diphtheria	5
Streptococci examinations	2,197
Mycology	11
Agglutinations	24
Vincent's Infection	0
Complement fixation tests	117
Test for Phenylketonuria (PKU)	6,353
Cytology	660
Water examinations	2,131
Milk and dairy products examinations	2,695
Sea food examinations	130
Examination for Negri bodies (smears & animal inoculation)	297
Virology	71
Rh Factor	0*
Miscellaneous	57

Total

*Birmingham Branch Laboratory Totals not included in this report.

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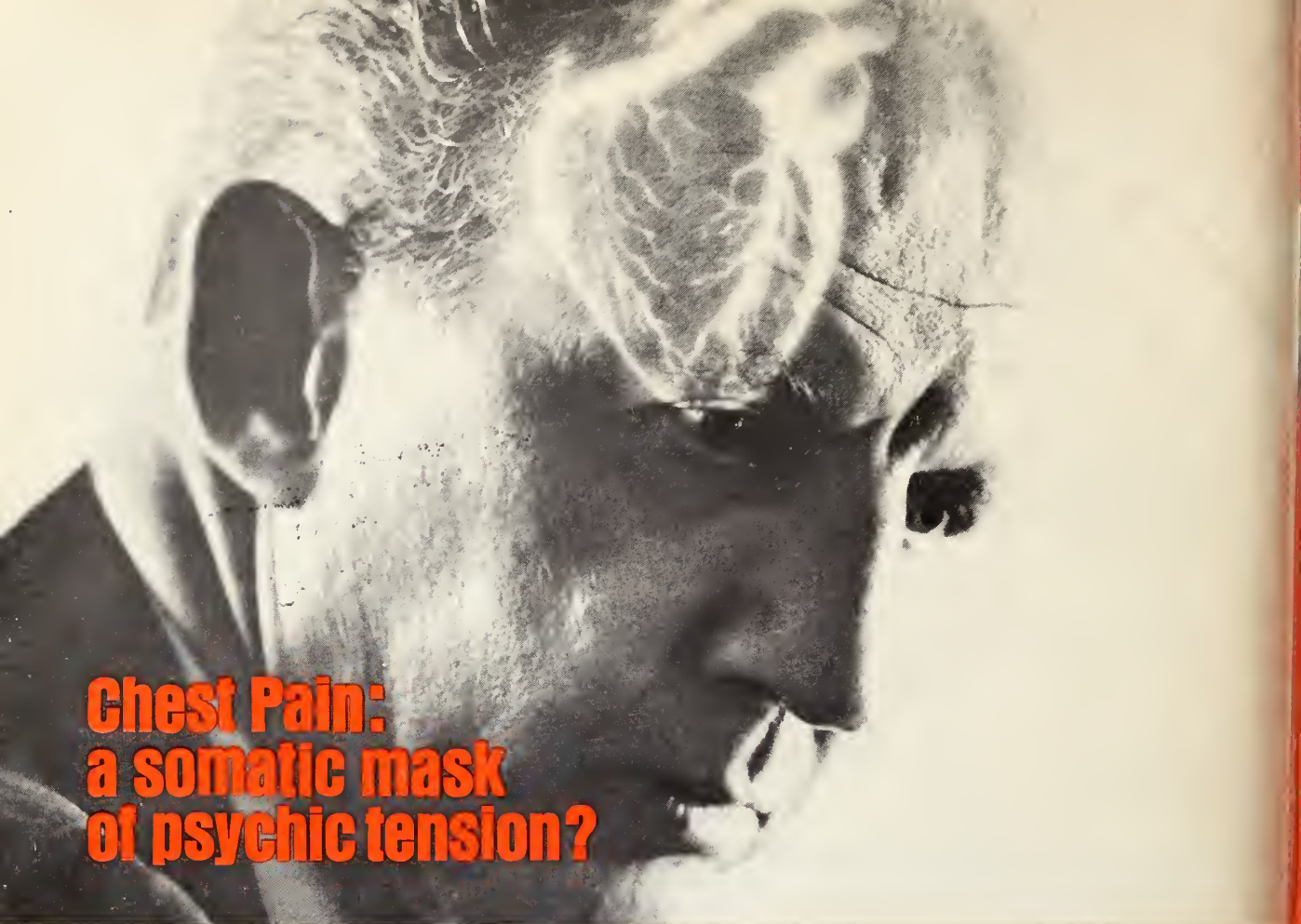
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Valium (diazepam) is generally well tolerated, and usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazard-

ous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged over-dosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage — Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hrs, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.

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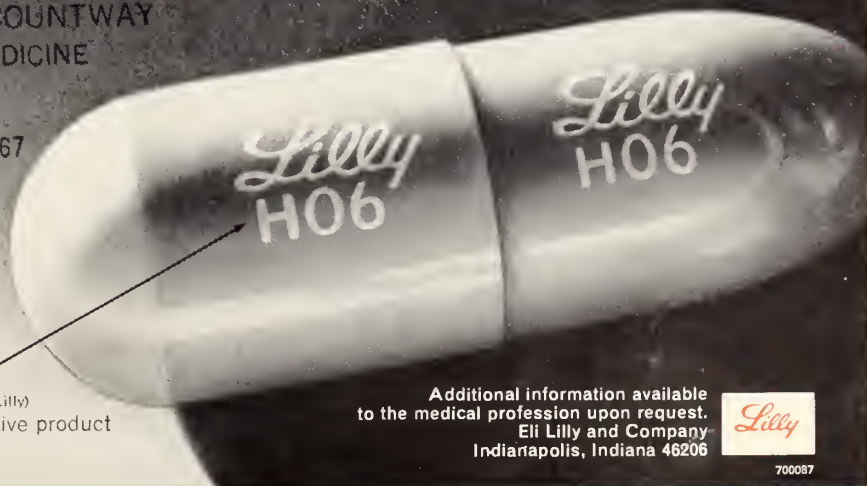
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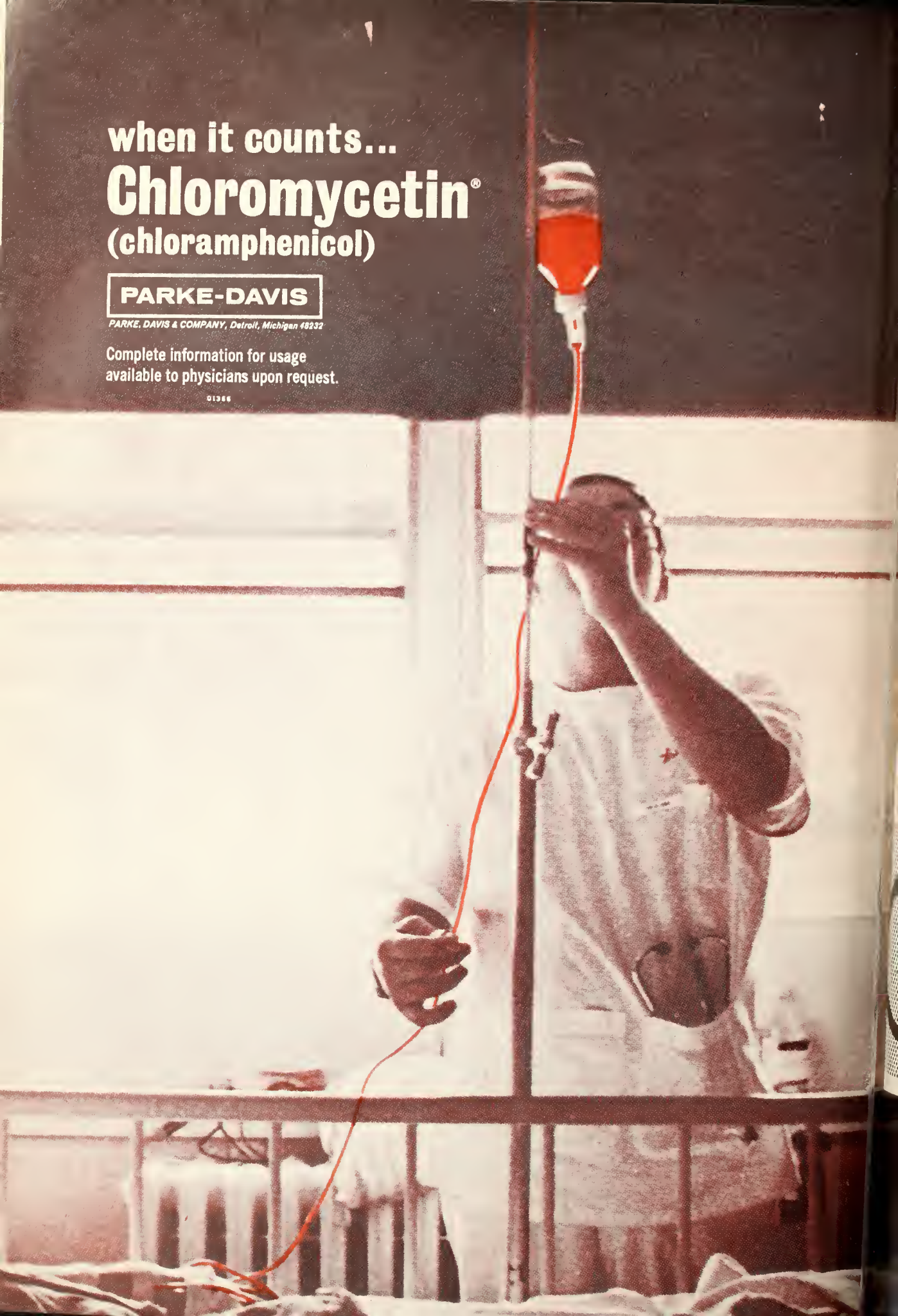
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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 36 • January, 1967 • No. 7

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104
Subscription Price \$5.00 Per Year
\$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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CONTENTS

President's Page	754
The Woman's Auxiliary	758
Editorial Comment	765
A Thought for the New Year	765
Regional Program for Heart, Cancer, and Stroke	768
The Lyons-Harrison Research Building	769
Urban Areas Gain Control	771
A Smelly Editorial	775
1966—A Review of Medical Achievements	776
Around the State	779
County Societies Meet	779
Vital Statistics	782
Tuberculosis An Important Public Health Problem	792
Scientific Section	797
"Cardiac Resuscitation," Glenn L. Foster, M. D., Gus G. Casten, M. D., and T. J. Reeves, M. D., Birmingham	797
Selection of Operation for Duodenal Ulcer—Gastric Resection Vs. Vagotomy and Pyloroplasty, Wyatt C. Simpson, M. D., FACS, Florence	807
Et Tu, Brute, Tinsley R. Harrison, M. D., Birmingham	817
Alabama's Physician Shortage Grows More Acute	822
Maternal and Child Health	824
Alabama Infant Mortality, Barbara H. Holleman, R. N., B. S., Harold Klingler, M. D., FACS, FICS, FACOG	824
Anti-Cancer Drug Tested on Hamsters	830
Community Medical Television Network Established in Atlanta, Georgia	832
1967 Scientific Session of the American Cancer Society	840
Crawford Williamson Long—Discoverer of Surgical Anesthesia, Emmett B. Carmichael, Birmingham	843
Plans for a Regional Medical Program for the State of Alabama	860
The Month in Washington	870
State Department of Public Health	874
A State Health Department Program in X-ray Protection, Ira L. Myers, M. D., M. P. H., F. A. P. H. A., Montgomery	874

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President's Page

On The Organization Of State Medical Association Presidents

The Organization of State Medical Association Presidents is totally void of official status. Its meeting is a forum to which the president, president-elect and immediate past-president of each State Medical Association is invited to discuss mutual problems of current and universal concern. Meetings are held in conjunction with the annual session and the Clinical Convention of the American Medical Association. A third meeting is generally held in August of each year.

It was my pleasure to represent you at the AMA meeting in Chicago in June and at the Clinical Convention of the AMA in Las Vegas, Nevada the last week in November, 1966.

The June meeting was poorly organized and the attendance was sparse. I am unable to recall a single worthwhile comment at the June meeting.

Conversely, the November session, under the Chairmanship of Dr. Dan. A. Nye, President of the Nebraska State Medical Association, was well organized, the advance publicity was adequate and the attendance reassuring.

The first discussion of the day was entitled, "Looking at Title XIX". One representative of each State Association in attendance was requested to report briefly on the status of Title XIX in his respective state. Mr. James H. Fleming, Director, Title XIX Information Center of the American Medical Association, discussed national aspects of this piece of legislation. It is hoped that certain features extant in Title XVIII, such as the free choice



Dr. J. O. Finney

of physician and facility, the principle of direct billing and the "usual and customary" fee elective can be incorporated in the federal law and thereby circumvent separate battle in each of the fifty state-houses.

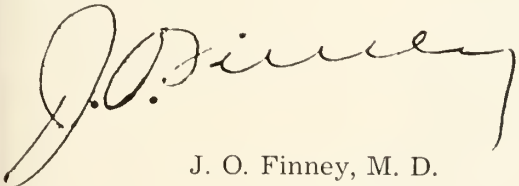
It appeared from the various reports and discussions that, at our current level of development, the Medical Association of the State of Alabama has pursued the matter more adroitly than the majority. True, we had the advantage of knowledge of difficulties encountered by State Medical Associations in states with early implementation of Title XIX; New York as an example. However, much of the credit for our favorable position goes to "Pat" Patterson and others

of the Central Office Staff who so assiduously and consistently studied the developing patterns in all the various states as soon as obtainable.

You are to be kept informed on developments pertinent to Title XIX at the state and national level by articles in the weekly Alabama MD. Your county society is to receive, at appropriate intervals, reports from our state Title XIX Information Center.

The second item discussed at the Las Vegas meeting concerned hospital based specialists. Dr. J. E. Miller of Dallas, Texas, Chairman of the Board of Chancellors, American College of Radiology, led the discussion. From his remarks and those from the floor it would appear that although the respective national and individual state society of the Hospital Based Specialists urges or demands separate and direct billing, the method is not as yet widely prevailing. Dr. Miller and those of his persuasion have a strong feeling that unless hospital based specialists promptly adopt and practice the philosophy of separate and direct billing, complete and permanent loss of individual and collective identity as related to private practitioners of medicine will soon ensue.

I consider the meeting of the State Medical Association Presidents in Las Vegas, Nevada, to have been worthwhile and shall encourage my successor to attend those held during his tenure of office.



J. O. Finney, M. D.
President

Deaths from emphysema in 1963 totaled 17,595, the U. S. Public Health Service reported. It was an increase of nearly 600% from the 1953 total of 3,010.

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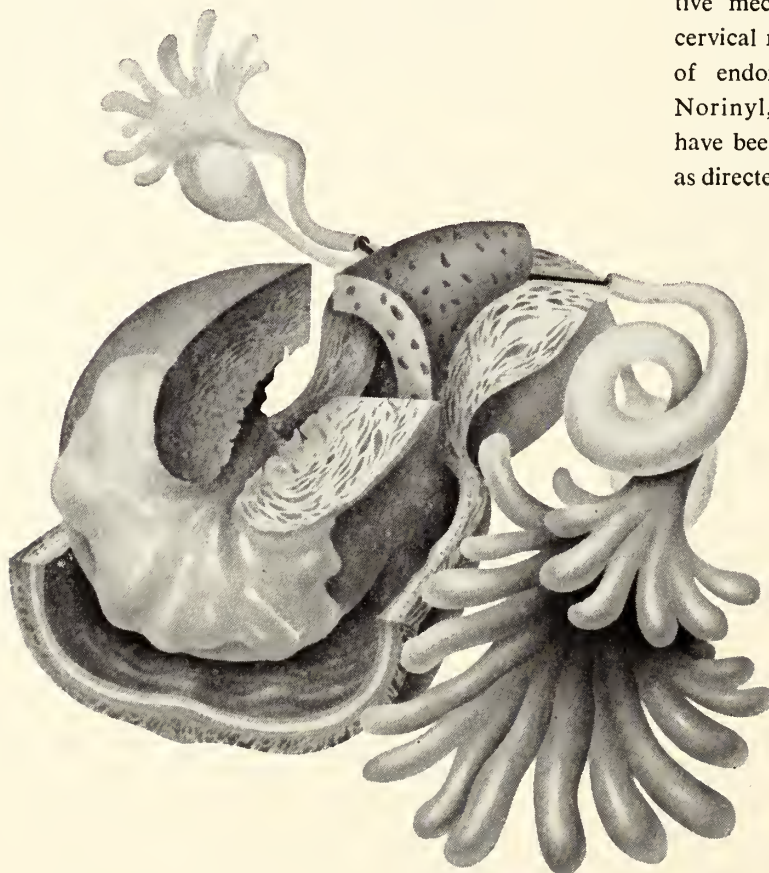
**inhibition of ovulation by means of
2 time-proved hormonal agents**

**production of a cervical mucus hostile to
sperm motility and vitality**

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to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

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An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Brvans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudolph, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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LABORATORIES INC. PALO ALTO, CALIF.

Norinyl[®] tablets

(norethindrone 2 mg. • mestranol 0.1 mg.)

for multiple contraceptive action

The Woman's Auxiliary

It is with pride that I write concerning membership in the Woman's Auxiliary to the Medical Association of the State of Alabama. The Auxiliary offers doctors' wives something they cannot get in any other organization: a chance to work with other doctors' wives on behalf of the medical profession.

The first Auxiliary to a medical society was born nearly 60 years ago when the doctors of Potowatomie County, Oklahoma, invited their wives to meet with them and help carry their ideas, thoughts and projects to the community. The organization of other state and county auxiliaries followed and an Auxiliary to the American Medical Association was organized in 1922 as the logical outgrowth of these auxiliaries.

The Woman's Auxiliary to the Medical Association of the State of Alabama was organized in Mobile on April 29, 1923. Twenty three doctors' wives were present and Mrs. Seale Harris of Birmingham was unanimously elected the first president. Through the years the Auxiliary has continued to grow and today more than 1,300 physicians' wives are active members of the Auxiliary in Alabama and our National membership exceeds 89,000.

Like the first Auxiliary, our foremost purpose is to help carry the ideas, thoughts, and projects of the Medical Society to the community; and surely as we begin this New Year the need for better understanding on the part of the lay public of the role of American medicine in our democratic way of life is the greatest in the history of medicine. Never before has this role been in greater danger of being subverted by the misinformed and the uninformed, by the self-seeking politician and by the disinterested voter.

The Auxiliary strives in every way possible to help the medical profession achieve

its foremost goal—the betterment of public health; and to help create a better image of medicine and favorable public sentiment.

In the future the Auxiliary will help to meet another need of the medical profession as it seeks to co-operate with the various political action committees to help elect to public office those men who realize, as we do, that American medicine, though far from being perfect, is the best in the world and that further change toward socialized medicine is a step in the wrong direction.

The Auxiliary also has a social function and quite properly so, for doctors' wives have a great deal in common and enjoy one another's company. Moreover, strengthened friendships among doctors' wives can sometimes lead to closer friendships and co-operation among the doctors themselves.

The Auxiliary wants and needs every eligible doctor's wife as a member. To be eligible for membership her husband must be a member in good standing in the Medical Association of the State of Alabama. A widow is eligible for membership if her husband, at the time of his death, was a member in good standing in the American Medical Association.

A physician's wife living in a county where there is no Auxiliary and wishing to join, may make application accompanied by dues of \$4.00 to the State Treasurer, Mrs. Curtis A. Smith, 79 Byrnes Blvd., Mobile. If eligible, she becomes a member-at-large of the State Auxiliary. There are many programs of the Auxiliary in which a member-at-large may participate. At present there are about 50 members-at-large in Alabama and more than 2,900 National members.

The New Year is a time for beginning and if your wife does not belong to the Auxiliary we invite her to join hands with the other physicians' wives throughout the State and

the Nation to help inform the uninformed on medically related subjects; to help doctors where help is needed; to mold public opinion, tactfully, wisely, and, in all cases, to the interest of good medicine—medicine unrestrained by prejudice or political influence.

Mrs. James C. Guin, Jr.,
President-Elect and Membership
Chairman, Woman's Auxiliary to
the Medical Association of the
State of Alabama.

Booklet Discusses Stroke Diagnosis and Management

A new booklet and a set of slides on the subject of stroke diagnosis and management have been issued by the American Heart Association as follows:

"Diagnosis and Management of Stroke," a 32-page booklet by James F. Toole, M. D., Winston-Salem, N. C., designed to provide information to the practicing physician, emphasizes diagnostic maneuvers which can be performed in any hospital setting. It includes selected references and a list of additional Heart Association materials available in the stroke area.

"The Stroke Syndrome—Clinical and Diagnostic Aspects," a set of 29 color slides and accompanying script prepared to assist the physician in diagnosing different forms of the stroke syndrome, with the emphasis on vascular causes. Intended both for individual study by physicians and as the basis for discussion at appropriate medical meetings, the slide set was prepared by Gilbert S. Ross, M. D., Albany, N. Y. and Arthur Klassen, M. D., Minneapolis.

Both items may be obtained through local Heart Associations or the AHA national office, 44 East 23rd Street, New York, N. Y. 10010.

Sparkling Soft Drinks . . .

pleasure for patients who need liquids



Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

Alabama Bottlers Association

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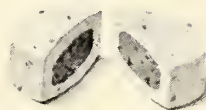
To "catch" your patient's cold
so others won't...



the speckled tablet with a core of difference

SUSTAINED-ACTION

Naldecon®



Each tablet contains:	Outer layer (immediate action)	Core (sustained action)
phenylpropanolamine HCl	20 mg	20 mg
phenylephrine HCl	5 mg	5 mg
phenyltoloxamine citrate	7.5 mg	7.5 mg
chlorpheniramine maleate	2.5 mg	2.5 mg

Each teaspoonful (5 ml) of syrup contains the equivalent of one-half tablet

For rapid and sustained symptomatic relief of colds and minor upper respiratory infections.

Prescribing Information: For complete information consult Official Package Circular. **Effectiveness:** Clinical experience has shown this formulation to be effective in relieving the symptoms of nasal congestion associated with pollen allergy or minor upper respiratory infections (common cold, nasopharyngitis, acute and chronic sinusitis). **Precautions:** Do not drive or operate machinery while taking Naldecon. Exceed dose or give to children under 6 years old only on advice of physician. **Contraindications:** Severe hypertension, hyperthyroidism, serious organic heart disease or severe diabetes mellitus. **Usual Dose:** Adults: One tablet morning, midafternoon and evening. Naldecon tablets are scored and may be broken for fractional dosage, without loss of sustained-action effect. **Supplied:** Bottles of 50 and 500 tablets. Syrup, 1 pt. bottle.

BRISTOL

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Division of Bristol-Myers Company
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the full 1/4 grain of phenobarb in the formula
makes the nervous edge off the pain
...helps bring out the best in codeine



Phenaphen[®] with Codeine

the only leading compound
analgesic that **calms**
instead of caffeinates

Each capsule contains:

Phenobarbital (1/4 gr.) 16.2 mg.
Warning: may be habit forming
Aspirin (2 1/2 gr.) 162.0 mg.
Penacetin (3 gr.) 194.0 mg.
Hyoscyamine sulfate 0.031 mg.
Codeine phosphate 1/4 gr. (No. 2),
1/2 gr. (No. 3), 1 gr. (No. 4)
Warning: may be habit forming

Contraindications: Hypersensitivity to any ingredient.

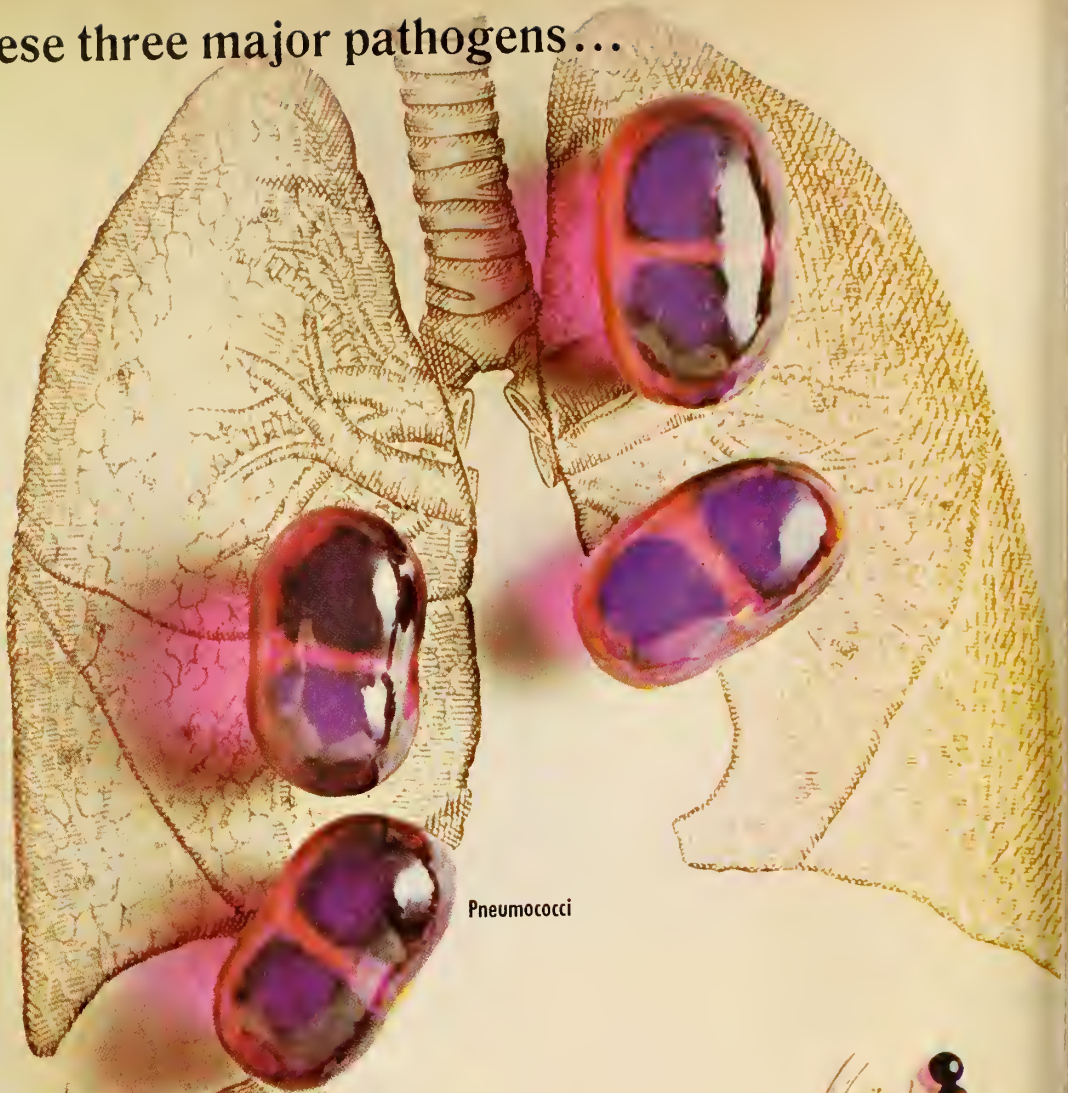
Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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Against these three major pathogens...



Pneumococci

Penicillin-Sensitive
Staphylococci



Beta-Hemolytic
Streptococci



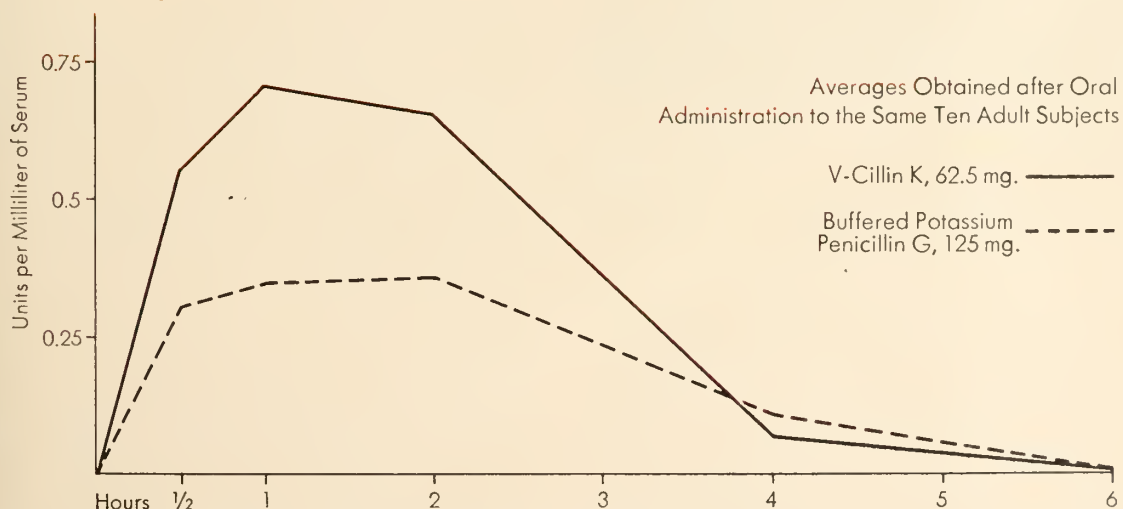
V-Cillin K[®] provides unexcelled oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive)		Streptococcus, Group A		Diplococcus Pneumoniae	
	Median MIC (mcg./ml.)	Range	Median MIC (mcg./ml.)	Range	Median MIC (mcg./ml.)	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Claxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M., New England J. Med., 269 1019, 1963.

with high blood levels, even in the presence of food

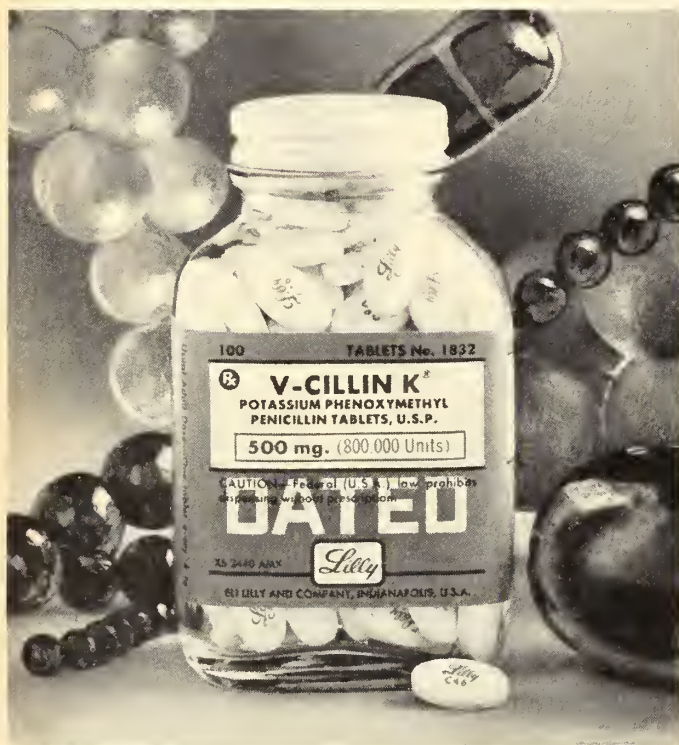


Adapted from Griffith, R. S., and Black, H. R., Current Ther. Res., 6 253, 1964.

V-Cillin K[®]  700157
Potassium Phenoxyethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxy-methyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxy-methyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in

those who have previously demonstrated sensitivity to penicillin. If severe hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness, and other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the development of growth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. For routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderate severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours; three doses may be employed; in females, 500 mg. every four hours; six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) in bottles of 50 and 100, 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly



A Thought For The New Year

As the year 1967 dawns, there are many indications that this will be a banner year for Medicine in all of its fields of endeavors. The political and legislative setbacks of 1965 have been partially or entirely overshadowed by scientific accomplishments which have left the physicians' overall image undiminished if not at an all-time high.

Most spectacular from a secular viewpoint has been the reversal via the 1966 elections of this nation's headlong plunge toward socialism. From almost every State in the Union the vote returns indicate a sharp veering toward the moderate viewpoint. It is safe to assume that the Congress now will proceed to eliminate or modify some of the more objectionable features of recently-enacted legislation.

At the State level, Legislatures can be depended upon to reflect this turnabout in public sentiment toward unrestricted socialized health care. The Era of the Bleeding Heart may have ended and future health legislation may be directed toward those who truly need

public assistance—as should have been the goal from the outset.

Many benefits have accrued to Alabama Physicians as a result of the disheartening defeats of 1965-1966. Most important has been the establishment of an unprecedented unanimity among members of the profession, as reflected by the Called Meeting of the College of Counsellors and House of Delegates of this Association on November 6, 1966.

With the pattern established, there is no reason why the members of this Association cannot advance to new heights in both the medical and secular arenas. Success breeds confidence, and confidence begets new successes.

With this thought in mind, plus the determination to remain united in all of our endeavors, there is no reason why the year 1967 should not be, in every sense of the word, truly a

HAPPY AND PROSPEROUS NEW YEAR



when he just can't sleep

Tuinal

**Sodium Amobarbital and
Sodium Secobarbital**



Tuinal helps wakeful patients fall asleep fast, stay asleep all night.

Indications: Tuinal, comprised of equal parts of Seconal® sodium (sodium secobarbital, Lilly) and Amytal® Sodium (sodium amobarbital, Lilly), is indicated for prompt and moderately long-acting hypnosis.

Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in pa-

tients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Supplied: ¾, 1½, and 3-grain Pulvules®.

Additional information available to physicians upon request.

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Regional Program For Heart, Cancer And Stroke

Congress last year passed an amendment to the Public Health Service Act which established the Regional Medicine Program for Heart, Cancer, Stroke and other major diseases. This program is to encourage and assist in establishing regional cooperative arrangements among hospitals, medical schools and research institutions for research training and continuing education in the field of these diseases and to afford the medical profession and medical institutions an improved opportunity for making available to patients the latest advances in the diagnosis and treatment of these diseases. The amendment provides that these purposes are to be accomplished without interfering with the patterns, or the methods of financing of patient care, professional practice, or with the administration of hospitals. The mechanisms by which the above purposes are to be accomplished are vague in this legislation. However, it is quite clear that the government has invited the cooperation of the practicing physicians, private institutions, and academic institutions to formulate plans to fulfill the purposes of the legislation. Congress has authorized funds to be expended over a period of three years for planning. These funds are being distributed as planning grants so that the individual regions may develop plans which meet the needs of the individual regions and at the same time meet the aims of the Regional Program. The law provides that these planning and operational grants are to be made to, and administered by, public or non-profit universities, medical schools, research institutions and other non-profit agencies with the approval of an advisory committee. This advisory committee is to include practicing physicians, medical center officials, hospital administrators, representatives of appropriate medical societies, voluntary health agencies, representatives of other organizations concerned with activities of the kind to be carried on under the Program and members of the public familiar with the need for services pro-

vided by the Program. As of October 15, 1966, some 15 regions, representing 43 million people, or 22 per cent of the nation's population, had received grants for planning activities under this Program.

The University of Alabama Medical Center, with the advice and approval of a Regional Advisory Committee, has submitted a request for a planning grant for the region defined as the State of Alabama. This Regional Advisory Committee is composed of 23 members with representatives of the Medical Association of the State of Alabama, University of Alabama Medical Center, Alabama Hospital Association, the State Board of Health of Alabama, Alabama Heart Association, Alabama Division of the American Cancer Society and the various health professions. This committee also includes representation from the various geographic regions of this State, a number of different hospitals and institutions and from various racial and social groups. During the period of planning, feasibility studies and operational aspects of the Regional Medical Program in this state, the Regional Advisory Committee will advise concerning policies and conduct of this Program. The policies established for conducting this Program and the manner in which these policies are carried out will require the approval of this Committee. The University of Alabama Medical Center will act as the grantee institution and will assume administrative responsibility for conduct of the Regional Medical Program. The University will, with the approval of the Regional Advisory Committee, appoint a Director and staff to plan for this Program.

The planning phase is to permit the medical profession, University Medical Center, hospitals and other concerned health agencies and organizations to cooperate in the development of methods, and proposals for establishing an effective Regional Medical Program for Heart, Cancer and Stroke in Alabama. This region has been tentatively de-

defined as the State of Alabama, but the ultimate boundaries of the region will be established during the period of planning through consultations with medical societies and hospitals within this state, adjacent states, when requested, and with the groups concerned with regional programs in the adjacent states. Within the Region, the hospitals which could function as cooperative hospitals and the facilities and trained personnel available at these hospitals will be determined. The present educational programs of the individual hospitals will also be determined as well as the desires and plans of the hospitals to enter into additional educational and training programs for not only physicians, but also nurses, technicians and paramedical personnel. It will be necessary to assess the requirements of cooperating hospitals in terms of personnel, facilities and equipment to undertake new or expanded

teaching and training programs. Plans will be developed for improving and expanding continuing education programs in this region. Plans will also be developed for establishing a cooperative relationship between the University Medical Center, the medical profession and hospitals for continuing education, research and patient care. The Regional Program authorized by the recent legislation provides the medical profession of this State with an opportunity in cooperation with hospitals, the University Medical Center, various governmental and voluntary health organizations and representatives of the public to develop a program for improved care for patients affected by diseases which are the major causes for death and disability in this country.

Harold T. Dodge, M. D.
Professor of Medicine
Director, Division of Cardiology

On December 21, Senator Lister Hill of Alabama announced that a grant for \$318,046.00 for the first year of a 2½-year program to support planning activities for a Regional Medical Program to improve the level of diagnosis and treatment for Heart Disease, Cancer, Stroke and related diseases had been awarded to the Alabama Region.

Headquartered at the Medical Center of the University of Alabama in Birmingham, the program will be coordinated by Dr. Joseph Volker, Vice-president for Birmingham affairs and Director of the Medical Center, who will work in co-operation with a Regional Advisory Committee broadly representative of the Health Resources of the state.

The Lyons-Harrison Research Building

All Alabama can take deep pride in the newest addition to the Medical Center in Birmingham, the Lyons-Harrison Research Building dedicated, appropriately, on the tenth anniversary of the Federal Health Research Facilities Act.

The building is named for two of Alabama's most distinguished physicians, Dr. Tinsley Harrison, Director of the Department of Cardiology until 1965 and now Professor of Medicine and Distinguished Professor of the University of Alabama, and the late Dr. Champ Lyons, who was Professor and Chairman of the Department of Surgery and Chief

of Surgical Services of University Hospital until his death in 1965.

In a brochure containing the dedication program, the University of Alabama Medical Center stated:

"The Lyons-Harrison Research Building stands as a dynamic symbol of the vast scientific effort to improve the health of man. Physically bridging the University of Alabama Medical Center's Basic Science Building and the University Hospital, the structure houses activities designed to add to the total of basic health knowledge and to

(Continued on Page 771)



after surgery

B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.



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Each capsule contains:
 Vitamin B₁ (Thiamine Mononitrate) 10 mg
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 Vitamin B₆ (Pyridoxine HCl) 2 mg
 Vitamin B₁₂ Crystalline 4 mcgm
 Vitamin C (Ascorbic Acid) 300 mg
 Niacinamide 100 mg
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 Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

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(Continued from Page 769)

improve clinical application of such knowledge . . .

"Eight years ago, when funds were sought through the Health Facilities Research Act, a bill co-authored by Alabama's Senator Lister Hill, the Medical Center's Research effort was contained in various areas totaling approximately 75,000 square feet in the Basic Science Building, the Dental Clinic Building, and the University Hospital and Hillman Buildings, and 4,234 square feet of space rented from the Jefferson County Public Health Building. Research and training projects, though burgeoning, were held in check by lack of space. An estimated \$780,000 in grants supported the combined research programs.

"The building grant proposal stated that the research space 'should be increased by 100%' . . .

"As research in the health sciences flourished throughout the nation and the world, so did the investigative efforts of the University of Alabama Medical Center. Broad programs in such areas as cardiovascular diseases, electron microscopy, surgical research, rheumatology, endocrinology, physiology, pulmonary maladies, and diseases affecting the oral cavity, expanded and gained stature. With the availability of space, many more gifted scientists were recruited, and their research capabilities brought additional grant support for personnel and equipment.

"Today, research and training grants stand at approximately \$6.5 million. The research facility, which originally contained 100,000 square feet, has been enlarged by 45,000 square feet, an addition made possible by further matching support from the Division of Research Facilities and Resources.

"Nearing completion is a research wing of the Veterans Administration Hospital, spanning 19th Street and joining the Lyons-Harrison Building. This structural bridge, the first between a veterans hospital and a university medical center, will complete an extensive

research complex, whose activities form the matrix of the Medical Center.

"The naming of the Lyons-Harrison Research Building, which links education and patient care, is a rededication of the purposes intrinsic to medical research—investigations to improve knowledge for better health."

Urban Areas Gain Control

With Alabama physicians reflecting an increasing awareness in matters politic, it is wise that they prepare themselves for a sweeping change in the attitude and philosophy of the State Legislature in 1967, a change—like so many nowadays—dictated by the federal government.

From the State Legislature's conception in 1819, it has been dominated by rural counties which reflected the rural interests of this state. For better or worse, this will change in this new year, and it will change because the U. S. Supreme Court said it must. In its historic "one man, one vote" decision, the tribunal compelled the Alabama Legislature to do what it had repeatedly refused to do—reapportion itself.

The result of this reapportionment of the House and Senate will be in sharp focus this month. No longer will the urban counties—Jefferson, Mobile, Montgomery, Madison, Etowah, Calhoun and Tuscaloosa be the whipping boys at the Capitol. All of a sudden they are in the driver's seat.

The extent of this shift in power can best be cited simply by quoting some figures. Ten years ago the counties of Jefferson, Mobile, Montgomery and Etowah, with a combined population of more than 1,000,000, had but three and one-half votes in the State Senate. The counties of Barbour, Lowndes, Marengo

(Continued on Page 774)



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN-SULFAS Chewable

(Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.

ERYTHROCIN-SULFAS Granules

(Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

70135B

A clinical cure rate of 97.7%



Brief Summary on next page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



URBAN AREAS GAIN CONTROL

(Continued from Page 771)

and Wilcox—with a combined population of less than 100,000—had four Senate votes.

By contrast, in the 1967 Senate these same four big counties will have 13 votes in the Senate, the same four small counties (under the multiple-county district system) will represent only one and one-twelfth votes.

An even more important statistic than those cited above is the legislative weight the seven biggest counties will have in both chambers of the Legislature. These seven counties (Jefferson, Mobile, Montgomery, Madison, Etowah, Calhoun and Tuscaloosa) will represent 16 votes in the Senate and 50 votes in the House. Thus they will be only two votes shy of a Senate majority and four votes shy of a House majority. Simply by persuading the lawmakers from two other urban-type counties, for example Morgan and Lauderdale, and a majority will be reached. Thus nine Alabama counties can outvote the remaining 58 counties.

How does this matter address itself to the medical profession in general and the Medical Association of the State of Alabama in particular? The answer should be obvious. In legislative matters of interest to medicine, the physicians from these urban counties will have a far greater challenge, a far greater burden. Their effectiveness in winning the support of their respective legislative delegations will mean the difference between victory and defeat.

This is not to suggest that the physicians in the rural counties are simply to sit back and let the city doctor do all the fighting. To the contrary, it simply means that all medicine must stand as one.

What was it Ben Franklin said so long ago? Something about hanging together or we would surely hang separately.

* * *

The space age was when you could find a place to park.

A Smelly Editorial

No wisecracks, please, about this editorial having a foul odor. It should. It's about skunks. Or polecats, if you prefer.

We have always known that the little animal, so adorable to look at, was a real stinker. But now comes a communique from the U. S. Public Health Service which goes much further in tarnishing the image of the skunk. The Health Service doesn't give a stinker's dam about the smell of the skunk but it has voiced grave concern about the bite.

It seems that the number of rabid skunks has reached "epidemic proportions" and has become a health problem of some consequence in the United States.

Research has indicated that skunks are not only far more susceptible to rabies than dogs, but they propagate the disease much more swiftly among themselves. The PHS had some figures to support its case—in 1965 there were 1,582 confirmed cases of rabies in skunks compared with only 412 rabid dogs.

There was at least one encouraging fact in the skunk report released by the Health Service. Alabama has a relatively low skunk population. Most certainly our skunks are just as refined, cultured, rabid and smelly as skunks elsewhere, we simply have fewer of them.

It was a mild surprise to learn that there were more skunks, and more rabid skunks, in Ohio than anywhere else in the nation. We would have guessed that the greatest concentration of skunks would have been in the District of Columbia.

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1966—A Review Of Medical Achievements

The Committee meeting room joined the laboratory and hospital as important contributors to medicine in 1966, The American Medical Association notes in its annual year-end review of medical developments. The review appears in the January issue of *Today's Health* magazine.

Three separate commissions or committees looked at the system by which health care is delivered to Americans, and reported strikingly similar findings:

The family physician—the doctor that sometimes is said to be disappearing from the modern scene—is absolutely essential to the health care system.

Two of the groups recommended an overhaul of medical education to provide for the training of a new kind of physician—a broadly-educated specialist in continuous, comprehensive health care.

In medical science, 1966 might be characterized as the year of vaccines. A prophylactic vaccine against Rh sensitization has shown virtually total protection in more than 300 women. A mumps vaccine proved nearly 100 per cent effective in clinical trials, and success was reported in developing a prototype anti-streptococcal vaccine. Work continued on rubella (German measles) vaccines, with high degrees of success reported in human trials. And, wide use of measles vaccines, several years in existence, was being urged in a campaign to “stamp out” measles.

Medical developments in 1966 also included:

—The first successful implantation of artificial devices—popularly but incorrectly called “artificial hearts”—into the chests of human beings to aid failing hearts.

—A drug that preliminary investigation indicated may improve memory.

—A book-length report of scientific studies of human sexual response.

—Adaptation and improvement of Russian-built artificial limbs which derive motive power from the electric potential of muscle, without need for straps and springs.

—Continued response by American physicians to the immense need of the Vietnamese people for medical care; the program through which they may volunteer for 60 days of service in Vietnamese hospitals was taken over administratively by the American Medical Association and is now known as AMA Volunteer Physicians for Vietnam.

—Medicare went into effect; the half-expected deluge of patients did not develop at hospitals but after three or four months hospital administrators began to experience paperwork problems.

—The peace of the self-satisfied in medical science was disturbed by a famed scientist, Dr. Ernst Chain of the University of London, who wondered if the present “golden era” of discoveries in drugs and other medicines is nearing its end. All the great discoveries of recent decades have been based upon earlier “break-through” discoveries of basic biological phenomena; the capital of the earlier basic discoveries may be nearly exhausted, he said, and no new basic biological concepts have been elicited.

—Two Americans, Dr. Charles Huggins and Dr. Peyton Rous, shared the Nobel Prize for medicine.

THE FAMILY PHYSICIAN

In all the discussions dealing with the need for a family physician, there was agreement that he should be a physician who is capable of providing continuous, comprehensive health care to individuals in a social (family) context.

But, although there was agreement on definition, the names given the “comprehen-

sive care" physician varied. The first report in which the need for such a doctor was mentioned, the Report of the National Commission in Community Health Services, calls him the "personal physician." In the Report of the Citizens Commission on Graduate Medical Education, commissioned by the American Medical Association, the name "primary physician" is chosen. The Ad Hoc Committee on Education for Family Practice, also constituted by the AMA, decided on "family physician" as the best description. Of interest is the fact that only the Ad Hoc Committee on Education for Family Practice was commissioned expressly to study family medicine and its future. The other two groups felt it necessary to comment on the need for comprehensive health care as an urgent problem.

Summarizing the background of the problem, the Citizens Commission pointed out in

its report that the general practitioner once filled the role of "comprehensive-care physician." Now his numbers are declining as the numbers of various medical specialists increase.

"Time has changed both him and his patient," said the Citizens Commission. "Patients now have access to a richer variety of medical services, and many of them have insurance to help pay for hospital and specialist services. In medicine, the major advances, the major triumphs of biomedical research, have not dealt with man as a whole but with his individual bodily systems or organs. As the science and art of medicine devoted to understanding and treating individual organs and systems have outrun the science and art of understanding and treating the whole man, specialty practice has become more necessary and more attractive."

The Commission points out that "The gen-



for psychiatric treatment

Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals □ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients

and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction □ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy □ *We will be pleased to provide further information upon request.*

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eral practitioner leaves behind him a vacuum that organized medicine has not decided how to fill."

A solution is suggested by the Commission: "A different kind of physician is called for"—a broadly and intensively educated specialist in comprehensive medicine.

The suggested educational program by which such specialists might be produced was recommended by the Ad Hoc Committee on Education for Family Practice in its report to the AMA Council on Medical Education. The report was transmitted to the AMA House of Delegates as its November, 1966, meeting in Las Vegas, Nev.

The Ad Hoc Committee identified the specialist in family medicine as a physician who would:

—Serve as the physician of first contact with the patient and provide a means of entry into the medical care system.

—Evaluate the patient's total health needs, providing personal medical care within one or more fields of medicine and referring the patient, when indicated, to appropriate sources of care while preserving the continuity of care through his continuing contact with and interest in the patient.

—Assume responsibility for the patient's comprehensive and continuous health care and act as leader or coordinator of the medical-hospital-ancillary services team that provides health services in our complex society.

—Accept responsibility for the patient's total health care within the context of his environment, including the community and the family or comparable social unit.

Behavioral and social sciences and the humanities should receive strong emphasis in the educational program, the Committee recommended. Flexibility in the program should be maintained, but certain basic disciplines would constitute the major portion of the curriculum. These include internal medicine, pediatrics, surgery, psychiatry, obstetrics and gynecology, and com-

munity medicine, as well as the behavioral and social sciences.

The program as envisioned would probably require three to four years in addition to the four years of medical school, and would be as rigorous as those required in many current specialties. The Ad Hoc Committee urgently recommended that specialty recognition be given to those physicians who complete the proposed educational program and pass the appropriate specialty board examination.

The recommendations of the Ad Hoc Committee were endorsed unanimously and without debate by the AMA House of Delegates at the 1966 AMA Clinical Convention in Las Vegas, Nev. The AMA Council on Medical Education, which had urged endorsement of the Ad Hoc Committee's recommendations, was authorized by the House of Delegates to "develop and initiate plans for implementation of the recommendations."

EDUCATION FOR CONTACT LENS WEARER

Popularity of contact lenses exceeds the public knowledge of how to wear them with safety. Ophthalmologists report that among 50,000 patients examined fourteen eyes had to be removed or were blinded and 157 eyes were permanently damaged. Also reported were 7,607 cases of damage from which patients recovered. Complications were more frequent among older persons and those with previous eye injuries or eye disease. Complications also were associated with prolonged wear or with sleeping with the lenses on the cornea. Contact lenses can be worn with safety, but the person who wears them needs instruction in proper lens handling, insertion, and removal techniques, with emphasis on cleaning and storage of the lenses. He must carefully follow the time schedules his ophthalmologist prescribes and should ask him for follow-up care at regular intervals. (J. M. Dixon, M. D., and others: "Complications associated with the wearing of contact lenses," *The Journal of the American Medical Association*, 14 March 1966).



around the state

COUNTY SOCIETY MEETINGS

ETOWAH COUNTY

Etowah County Medical Society met on October 18 at the Reich Hotel in Gadsden with Dr. Ray Johnson, President, presiding. Thirty-one members were in attendance.

Principal speakers were Mr. L. P. Patterson, Executive Director of MASA, and Mr. Bob Ingram, Assistant Executive Director, speaking on Legislative and political activity of MASA and the impact of Title XIX on Alabama.

On November 15, Dr. Marshall Garrett was the speaker at a scientific meeting at the Reich Hotel.

FRANKLIN COUNTY

Franklin County Medical Society met on October 18 at the North Alabama Hospital. Dr. Robert T. Long, president, presided.

Theme of the meeting was scientific with Dr. William Brakefield, Birmingham, speaking on Intrauterine Transfusions.

The Society approved the establishment of a Cancer Clinic for indigent care and diagnosis in the Tri Cities Area.

On November 8, the meeting was held at 7 P. M. at the North Alabama Hospital in Russellville. Principal speaker was Dr. Edward W. Stevenson, Birmingham.

TALLADEGA COUNTY

Talladega County Medical Society met on November 1, at the Sylacauga Hospital with Dr. Harvey B. Campbell, president, presiding. Sixteen members attended the meeting.

Dr. J. D. Rayfield, Sylacauga, County Health Officer gave a report.

Next meeting will be the annual Christmas meeting to be held at the Talladega Country Club.

BALDWIN COUNTY

Dr. Percy Bryant, president, presided at the meeting of the Baldwin County Medical Society on December 6. The meeting was held at the Thunderbird Inn. This was the annual Christmas party of the Society.

New officers elected were Dr. John Foster, president; Dr. F. H. Dietze, vice-president; and Dr. L. E. Rockwell, secretary-treasurer.

LAUDERDALE COUNTY

Lauderdale County Medical Society met on November 14 at the Eliza Coffee Memorial Hospital, Dr. M. C. Dunn, presiding. Thirty-one members attended the meeting.

Representatives of Lauderdale County Community Action and School Board discussed Head Start Health Plans.

(Continued on Page 782)

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or
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alone
won't
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The cryptenamine in DIUTENSEN-R helps improve normal vasodilating reflexes while the thiazide and reserpine components maintain vasorelaxant, sedative, and saluretic benefits. Cryptenamine lowers pressoreceptor reflex thresholds (which may be abnormally high in hypertension) — “resets” pressoreceptors to function at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure continuing benefits — may reduce or even obviate the need for poorly tolerated drugs later in therapy.

“...quite apart from the problem of vascular damage, there arises a possibility of virtual ‘cure’ or remission of hypertension when treatment is early, i.e., before too many other secondary pressor systems have entered into the disequilibrium of pressor control, and when it is adequately suppressive.”

Corcoran, A. C.: The choice of drugs in the treatment of hypertension. In: *Drugs of Choice 1966-67*, W. Modell, Ed., St. Louis, C. V. Mosby Company, 1966, p. 417.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals.

However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars. **Side effects and**

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(Continued from Page 779)

WINSTON COUNTY

The Winston County Medical Society met on November 14 at the Natural Bridge Restaurant with Dr. Hobson Manasco, president, presiding. Four members attended the meeting.

Dr. Thomas Bolding, head of Alabama Planned Parenthood, spoke on Mobile Unit—Health on Wheels.

CRENSHAW COUNTY

Crenshaw County Medical Society met on October 11 at the Crenshaw City Hospital. Dr. James C. Ray, president, presided. Four members were present.

Principal speaker was Dr. James C. Ray who spoke on Medicare.

WALKER COUNTY

Dr. R. J. Schlitt of Jasper, president of the Walker County Medical Society, presided at the October 25 meeting held at the Whiteway Restaurant. Twelve members attended the meeting.

Dr. Robert R. Roper, radiologist from Jasper was the principal speaker. His subject was "Radiographic Diagnosis of Pneumonia."

Walker County Medical Society met on November 22 at the Whiteway Restaurant. Dr. Schlitt presiding. Ten members attended the meeting.

Dr. George Cassaday, Birmingham, was the principal speaker. His subject was "Amniocentesis."

The next meeting of the Walker County Medical Society will be held on January 24 at the Musgrove Country Club.

RANDOLPH COUNTY

A business meeting was held by the Medical Society of Randolph County on November 3. The meeting was held at the Randolph County Hospital with Dr. Carrol Sasser, Chief of Staff, presiding. Seven members were present.

GENEVA COUNTY

Geneva County Medical Society met on November 7, with Dr. W. H. Blakeney presiding. Five members were present.

Dr. Walker Sorrell, Pathologist from Montgomery spoke on "Hospital Infections and Source."

LIMESTONE COUNTY

Dr. Stanley Hand, President of the Limestone County Medical Society presided at the November 8 meeting at the Athens-Limestone Hospital. Nine members were present.

During the business meeting uniform fee schedule was adopted.

VITAL STATISTICS

The following changes have been made in the 1966 Roster of the Medical Association of the State of Alabama as of December 1, 1966. (These changes include the months of September, October, and November 1966.)

NEW MEMBERS

Akin, Tony Joe, 905 Madison Street, Huntsville, Ala., 35801. (Madison County Medical Society.)

Argires, James Peter, University Hospital, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

Anderson, Henry Luther, Jr., Huntsville Clinic, Huntsville, Ala., 35801. (Madison County Medical Society.)

Bearman, Howard Harold, 16 North 77th Street, Birmingham, Ala., 35206. (Jefferson County Medical Society.)

Boger, Robert Martin, 1304 Government Street, Mobile, Ala., 36604. (Mobile County Medical Society.)

Brascho, Donn Joseph, University Hospital, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

Burch, Andrew Damrell, 1720 Springhill Avenue, Mobile, Ala., 36604. (Mobile County Medical Society.)

VITAL STATISTICS

Corley, William Sim, 7722 Benaroya Lane, Huntsville, Ala., 35801. (Madison County Medical Society.)

Cress, Robert Henry, 1717 South 6th Avenue, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

Darnell, Henry Livingston, Jr., 9228 Gadsden Highway, Birmingham, Ala., 35235. (Jefferson County Medical Society.)

Denny, Robert Campbell, Jr., Brecon Circle, Talladega, Ala., 35160. (Talladega County Medical Society.)

Duggan, Mell Leonidas, 9228 Gadsden Highway, Suite D, Birmingham, Ala., 35235. (Jefferson County Medical Society.)

Eubanks, James Russell, Jr., 1710 Center Street, Mobile, Ala., 36604. (Mobile County Medical Society.)

Goodson, William Houston, Jr., 724 Madison Street, Huntsville, Ala., 35801. (Madison County Medical Society.)

Green, Edward Jackson, 166 Louiselle Street, Mobile, Ala., 36607. (Mobile County Medical Society.)

Hewitt, Bill Vern, 905 Madison Street, Huntsville, Ala., 35801. (Madison County Medical Society.)

Kiger, Robert Gary, NASA Medical Center, Building 4249, Redstone Arsenal, Ala., 35808. (Madison County Medical Society.)

Mardre, Robert Burton, Jr., University Hospital, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

McKee, Bobby Earl, 1563 Springhill Avenue, Mobile, Ala., 36604. (Mobile County Medical Society.)

Miree, Mallory Forbes, Frank Kay Clinic, 3015-7th Avenue South, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

Moorman, Robert Searcy, Jr., Medical Arts Building, Huntsville, Ala., 35801. (Madison County Medical Society.)

Nelms, Joseph Ernest, 1600 Center Street, Mobile, Ala., 36604. (Mobile County Medical Society.)

Rasberry, James Norbrette, 1529 North 25th Street, Birmingham, Ala., 35234. (Jefferson County Medical Society.)

Reeder, James Lendon, Guin, Ala., 35563. (Marion County Medical Society.)

Bordenca, Anna, 2358 Whitesburg Drive, Huntsville, Ala., 35801. (Madison County Medical Society.)

Robinson, Oliver Gordon, Jr., 1016 South 18th Street, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Ryan, Robert Thomas, Jr., Lloyd Noland Hospital, Fairfield, Ala., 35064. (Jefferson County Medical Society.)

Taylor, John Segrest, 1720 Springhill Avenue, Mobile, Ala., 36604. (Mobile County Medical Society.)

Taylor, William Henry, Jr., 1029-22nd Street South, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

Tingley, John Oliver, 1529 25th Street North, Birmingham, Ala., 35234. (Jefferson County Medical Society.)

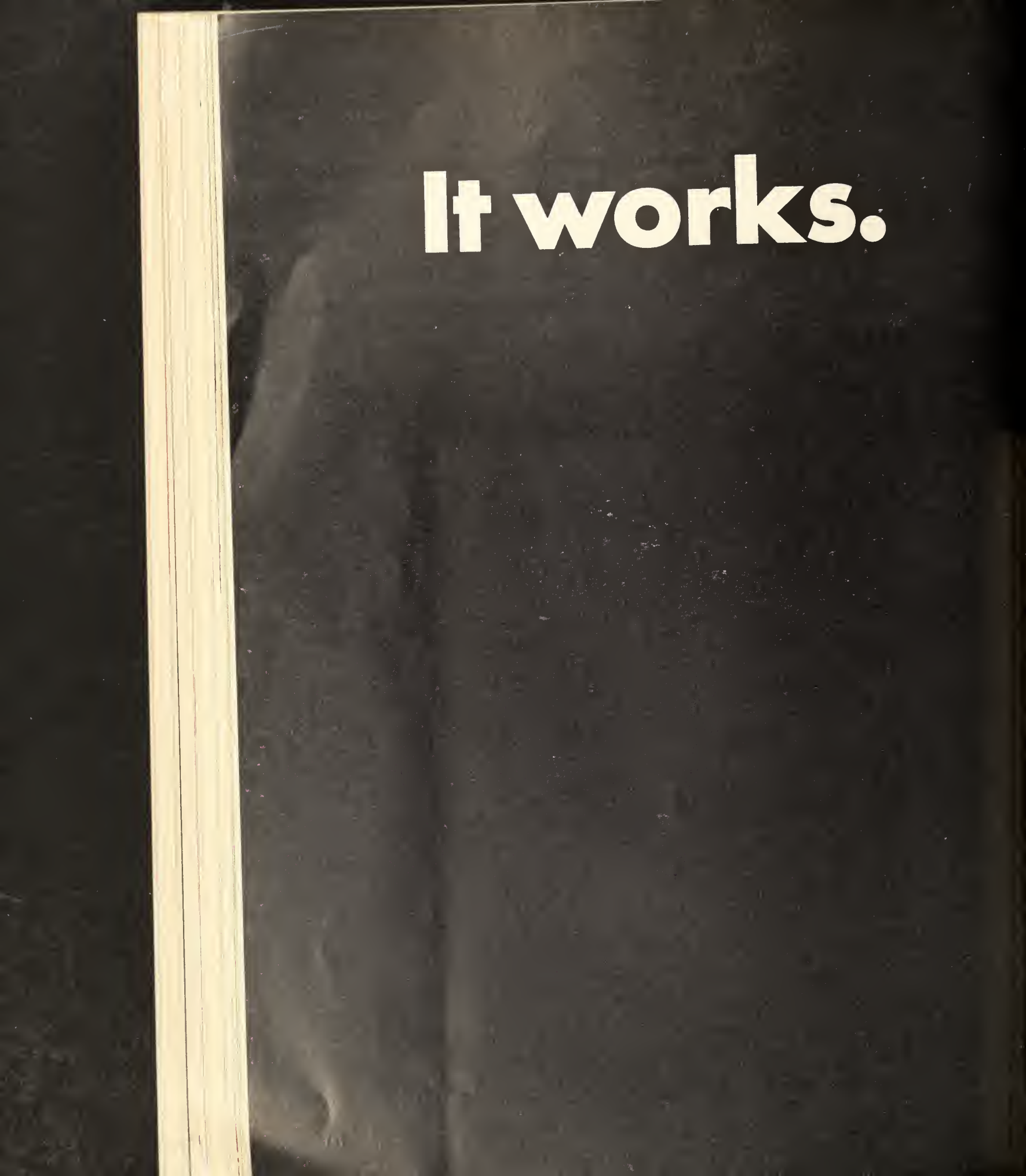
Townsley, James Thomas, 2310 Whitesburg Drive, Huntsville, Ala., 35801. (Madison County Medical Society.)

Walker, George Roy, Jr., 930 Franklin Street, Huntsville, Ala., 35801. (Madison County Medical Society.)

Whitman, Marcus, Jr., 619 South 19th Street, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

Wilhite, Wilson Cecil, Jr., 1919 South 7th Avenue, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

(Continued on Page 785)



It works.

SUMMARY:

TREST[®] (METHIXENE HYDROCHLORIDE)
relieves G.I. spasm, hyperactivity
and associated pain by directly
antagonizing the parasympathetic
nervous system.

Each tablet contains methixene hydrochloride, 1 mg.

INDICATIONS: Gastrointestinal Spasm and Hypermotility.

CONTRAINDICATIONS: Pyloric obstruction, gastric retention, obstructive organic disease of the gastrointestinal tract, organic cardiospasm, duodenal stenosis, stenosing peptic ulcer, and urinary bladder neck obstruction or prostatic hypertrophy are contraindications to the use of this drug.

WARNING: Overdosage produces anticholinergic side effects. Although the animal reproduction studies are negative, until there is clinical confirmation of safety in pregnancy, this product should not be used in women who may become pregnant unless in the opinion of the physician the benefits outweigh the risks.

PRECAUTIONS: Use only with caution in patients with certain types of cardiovascular disease, since anticholinergic drugs may cause arrhythmias. Extensive clinical studies of TREST have shown no evidence of glaucoma. However, the possibility exists that it can occur since it has been reported as a characteristic side effect of anticholinergic drugs. This product does not replace definitive treatment in organic gastrointestinal disease.

SIDE EFFECTS: Side effects are generally absent when TREST is used in the recommended dosage of 1 to 2 mg. three times daily. Uncommonly, allergy or sensitivity to the drug may be manifested by generalized rash or widespread desquamation. In case of prolonged or massive overdosage, dry mouth, blurred vision, and urinary retention, typical side effects common to anticholinergic drugs, may occur. Occasionally, sensitive patients may notice mild dryness of mouth or slight blurring of vision from doses of 2 mg. or more. Most patients tolerate single doses of 5 mg. without such side effects.

DOSAGE: The usual adult dosage is 1 mg. by mouth three times daily. If necessary, the dose may be increased to 2 mg. three times daily. Pediatric dosage has not been determined.

CAUTION: Federal law prohibits dispensing without prescription.

Puts the G.I. tract to rest

DORSEY LABORATORIES • a division of The Wander Company • Lincoln, Nebraska

An antispasmodic that antagonizes.

It works.

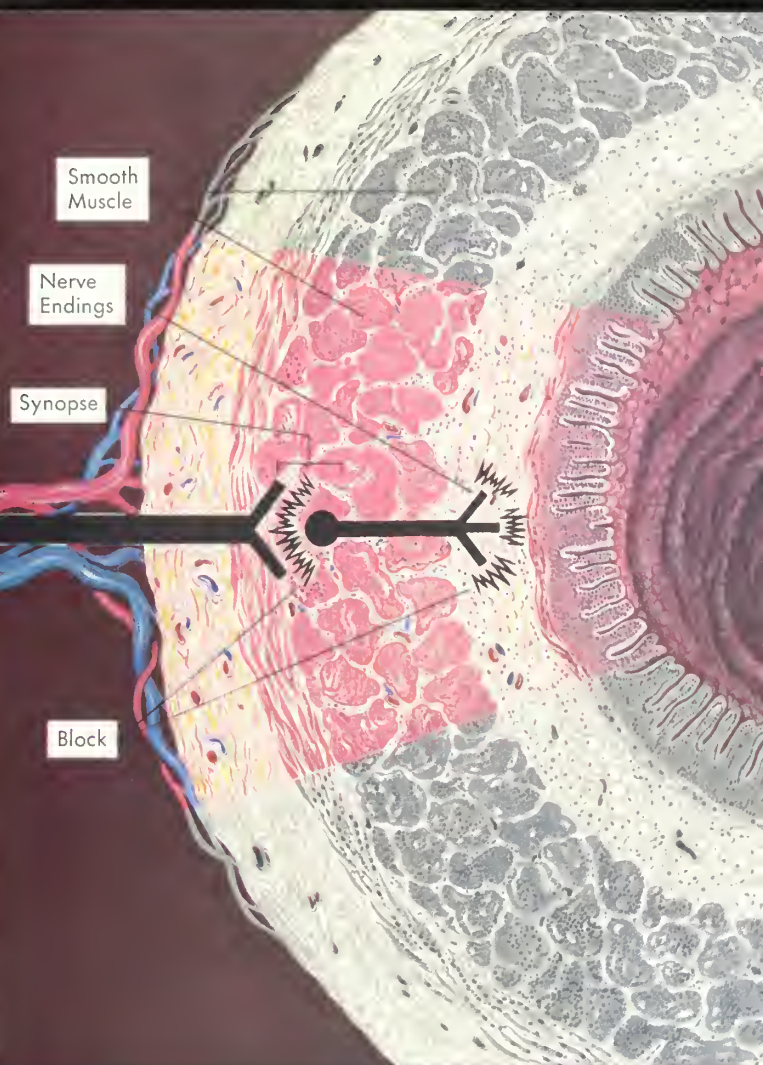
How TREST[®] (METHIXENE HYDROCHLORIDE) works.

parasympathetic nerve

TREST (methixene hydrochloride) directly antagonizes the parasympathetic nervous system.

TREST (methixene hydrochloride) blocks the action of acetylcholine formed at the synapses and visceral parasympathetic nerve endings.

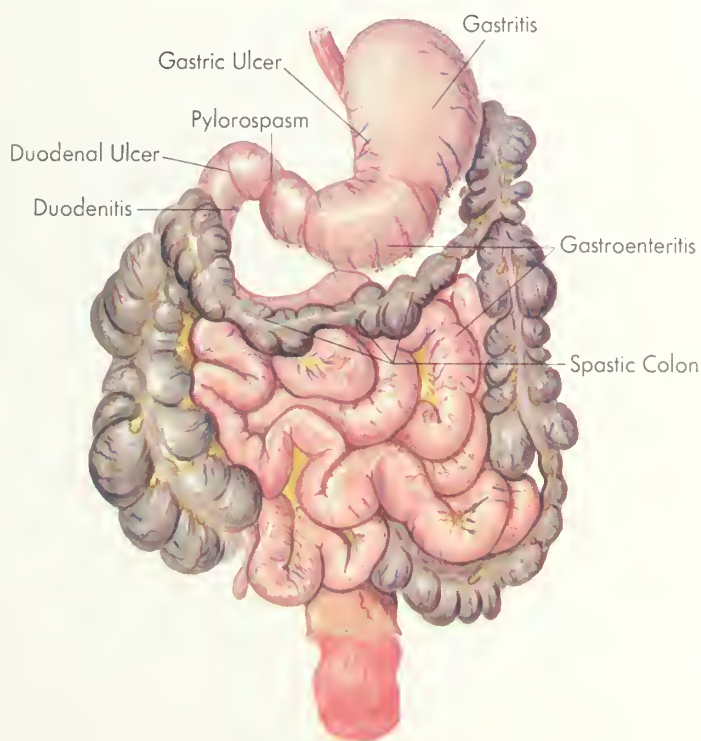
Therefore, nerve impulses are prevented from reaching the smooth muscle layer.



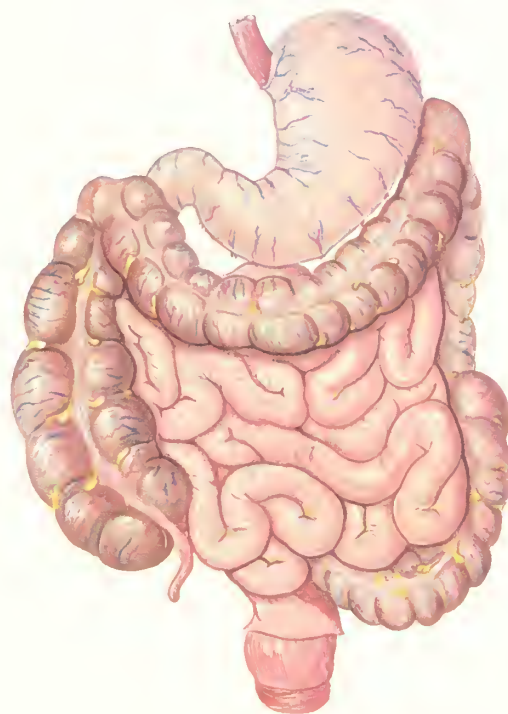


It works.

TREST[®] (METHIXENE HYDROCHLORIDE)
**relieves gastrointestinal
spasm, hyperactivity
and associated pain
in:**



Put the gut to rest
with your prescription for
TREST[®]
(METHIXENE HYDROCHLORIDE)



It works.

Evidence that TREST[®] (METHIXENE HYDROCHLORIDE) works.

EFFECTIVENESS AND SAFETY

t.i.d. dosage in milligrams

1mg. symptomatic relief

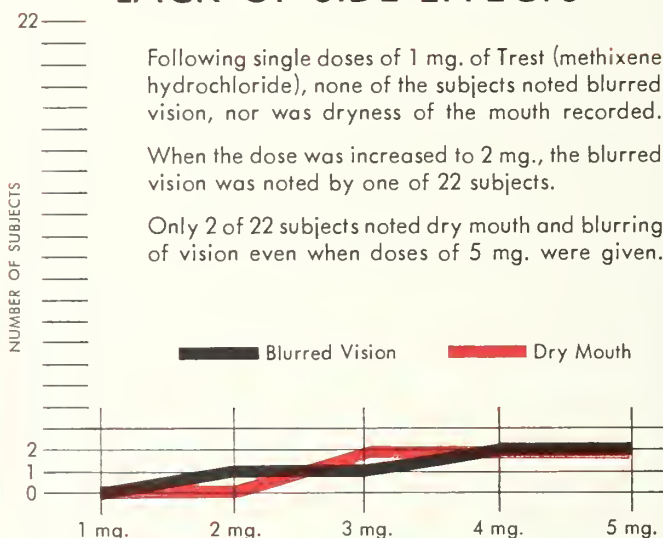
2 mg. upper recommended clinical dose/greater
pharmacologic activity and symptomatic
relief/side effects uncommon

10 mg.

Studies with 372 subjects revealed no adverse effect upon vital organs when dosage was increased 10 times the normally effective dose of 1 mg. t.i.d. for periods up to 2½ years of continued administration.

LACK OF SIDE EFFECTS

Only 2 of 22 subjects noted dry mouth and blurring of vision even when doses of 5 mg. were given.



Conclusion: Typical atropine-like side effects are not expected when Trest is used 1 mg. t.i.d. These effects are uncommon when the dosage is increased to 2 mg. t.i.d.

"A highly satisfactory symptomatic response was obtained in 20 of the 23 patients who took 1 mg. of methixene hydrochloride (Trest) by mouth three times daily. No side effects occurred at this dosage during administration of the medication itself.

"Methixene hydrochloride (Trest) provides highly gratifying symptomatic relief in a variety of conditions associated with gastrointestinal motility without producing the usual atropine-like side effects and without requiring concurrent barbiturate sedation."

—Martins, J. K.:

—Martins, J. K.:
Clin. Med. 72:1313-1316
(Aug.) 1965.

"... in a series of 47 patients suffering from various types of functional bowel distress. The superiority of this drug (Trest) in dosage of 1.0 mg. three times daily by mouth over the placebo is statistically significant. At that dosage level, side effects were not observed." —Huffard, A. R.:

—Huffard, A. R.:
Clin. Med. 72:1151-1155
(July) 1965.

It works.

**An
antispasmodic
that
antagonizes.**

VITAL STATISTICS

(Continued from Page 783)

DEATHS

Anthony, J. C., 1324-22nd Street, South, Apt. 1, Birmingham, Ala. Deceased. (Jefferson County Medical Society.)

Beck, James S. P., Tuscaloosa, Ala. Deceased September 9, 1966. (Tuscaloosa County Medical Society.)

Bush, David A., New Brockton, Ala. Deceased October 23, 1966. (Coffee County Medical Society.)

Henderson, Ernest A., 8217 North 57th Drive, Glendale, Arizona. Deceased. (Lee County Medical Society.)

Johnston, Francis T., Brundidge, Ala. Deceased October 23, 1966. (Pike County Medical Society.)

Keller, Julian J., 414 10th Street, Tuscaloosa, Ala. Deceased. (Tuscaloosa County Medical Society.)

Lisenby, James O., Atmore, Ala. Deceased October 31, 1966. (Escambia County Medical Society.)

Lucas, Robert L., Anniston, Ala. (Calhoun County Medical Society.) Deceased June 16, 1966.

Mayfield, Peabody B., Tuscaloosa, Ala. Deceased. (Tuscaloosa County Medical Society.)

CHANGE OF ADDRESS

Baker, Grady L., present Huntsville, Ala., to 930 Franklin Street, S. E., Suite 107, Huntsville, Ala., 35801. (Madison County Medical Society.)

Bowling, Robert S., Jr., present Jackson, Ala., to P. O. Box 428, Jackson, Ala., 36545. (Clarke County Medical Society.)

Brock, William M., present Montgomery, Ala., to 1710 Pepperell Parkway, Opelika, Ala., 36801. (Montgomery County Medical Society.)

Carter, John C., present Birmingham, Ala., to 924 South 18th Street, Birmingham, Ala. 35205. (Jefferson County Medical Society.)

Crawford, Samuel J., present Jacksonville, Ala., to Box 275, Mandeville, Louisiana, 70448. (Calhoun County Medical Society.)

Crum, Gertrude L., present Montgomery, Ala., to 1415 East South Boulevard, Montgomery, Ala., 36111. (Montgomery County Medical Society.)

Crum, William B., present Montgomery, Ala., to 1415 East South Boulevard, Montgomery, Ala., 36111. (Montgomery County Medical Society.)

Daniel, Robert Raymond, 838 Grey Avenue, Evanston, Illinois. Moved from State. (Bullock County Medical Society.)

Daniel, William A., Jr., present Montgomery, Ala., to 1919-7th Avenue South, Birmingham, Ala., 35233. (Montgomery County Medical Society.)

Davis, Luther, Jr., present Tuscaloosa, Ala., to Box 2389 Tuscaloosa, Ala., 35401. (Tuscaloosa County Medical Society.)

Deibert, Kirk Robert, present Florence, Ala., to Route 8, Box 234, Jackson Highway, Florence, Ala., 35630. (Lauderdale County Medical Society.)

deShazo, William F., present Jackson, Ala., to P. O. Box 428, Jackson, Ala., 36545. (Clarke County Medical Society.)

Draughon, Robert Lee, Jr., present Birmingham, Ala., to 2221 Allendale Place, Montgomery, Ala., 36111. (Jefferson County Medical Society.)

Gedney, Leigh M., Dothan, Ala. Moved to Atlanta, Georgia. (Houston County Medical Society.)

Glenn, E. Byron, present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Guice, John R., present Decatur, Ala., to 1107-16th Avenue, S. E., Decatur, Ala., 35601. (Morgan County Medical Society.)

(Continued next Page)

VITAL STATISTICS

Herbert, Floris Mary, present Montgomery, Ala., to New Orleans, Louisiana. Moved out of State. (Montgomery County Medical Society.)

Hodges, E. Julian, present Scottsboro, Ala., to P. O. Box 370, Scottsboro, Ala., 35768, (Jackson County Medical Society.)

Hutchinson, Robert S., Shawmut, Ala., to Box 254, Lanett, Ala., 36863. (Chambers County Medical Society.)

Kates, William A., Jr., present Huntsville, Ala., to 930 Franklin Street, Suite 106, Huntsville, Ala., 35801. (Madison County Medical Society.)

Kelly, Thomas Glenn, present Jasper, Ala., to 1600-5th Avenue, Jasper, Ala., 35501. (Walker County Medical Society.)

Marshall, Wallace S., Anniston, Ala. Moved out of State. (Calhoun County Medical Society.)

McElroy, Andrew H., Jr., present Huntsville, Ala., to 2914 Barcodey Road, S. E., Huntsville, Ala., 35802. (Madison County Medical Society.)

Merck, Daniel E., present Birmingham, Ala., to 1919-7th Avenue South, Birmingham, Ala., 35233. (Jefferson County Medical Society.)

Miree, Aubrey S., III, present Birmingham, Ala., to 205 South Pine Street, Florence, Ala., 35630. (Jefferson County Medical Society.)

Nicholson, George Bryan, present Selma, Ala., to 1703 Broad Street, Selma, Ala., 36701. (Dallas County Medical Society.)

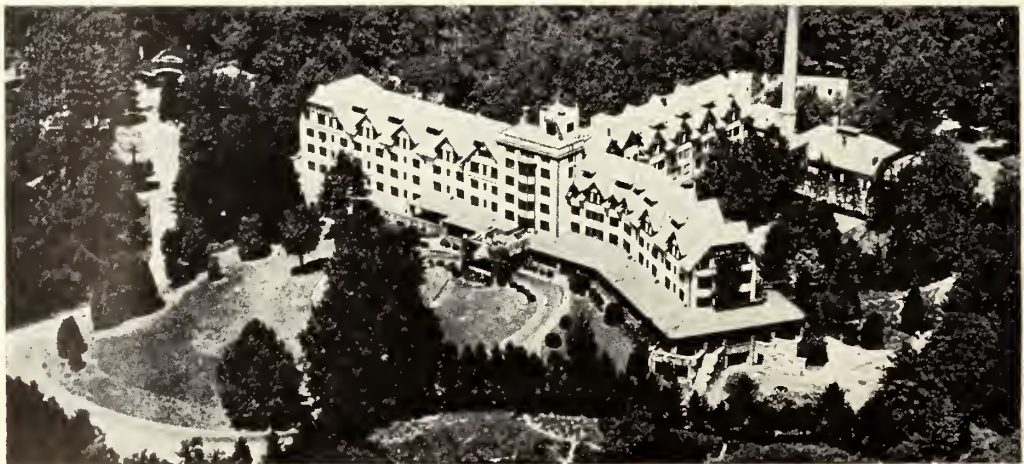
Norman, Patricia H., present Birmingham, Ala., to 2916 Virginia Road, Birmingham, Ala., 35223. (Jefferson County Medical Society.)

APPALACHIAN HALL

ESTABLISHED 1916

ASHEVILLE

NORTH CAROLINA



An institution for the diagnosis and treatment of psychiatric and neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin coma, electroshock and psychotherapy are employed. The institution is equipped with complete laboratory facilities, including electroencephalography and x-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

VITAL STATISTICS

Oliver, Robert K., present Tuscaloosa, Ala., to 44 Arcadia Drive, Tuscaloosa, Ala., 35401. (Tuscaloosa County Medical Society.)

Pleasant, William Alfred, present Decatur, Ala., to 309 Vine Street, N. W., Decatur, Ala., 35601. (Morgan County Medical Society.)

Reese, Dorothy A., present Tuscaloosa, Ala., to 2312-19th Avenue, Northport, Ala., 35476. (Tuscaloosa County Medical Society.)

Retan, John W., present Birmingham, Ala., to 1701-9th Avenue South, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Snoddy, William T., Jr., present Jasper, Ala., to 1600-5th Avenue, Jasper, Ala., 35501. (Walker County Medical Society.)

Spruell, William H., present Helena, Ala., to 2205-B Montreat Circle, Birmingham, Ala., 35216. (Jefferson County Medical Society.)

Waller, William C., present Montgomery, Ala., to 849 Washington Street, Montgomery, Ala., 36104. (Montgomery County Medical Society.)

White, Joe E., present Birmingham, Ala., to 9228 Gadsden Highway, Birmingham, Ala., 35235. (Jefferson County Medical Society.)

Whitehead, Leslie E., Decatur, Ala., to 2708 Westminster Way, S. E., Huntsville, Ala., 35801. (Madison County Medical Society.)

Woodley, Laurence S., present Tuscaloosa, Ala., to 238 15th Street, East, Tuscaloosa, Ala., 35401. (Tuscaloosa County Medical Society.)

TRANSFERS

Reagan, Jack E., 102 S. Pine, P. O. Box 1161, Florence, Ala., 35630. (Transfer from member Jefferson County Medical Society, to member Lauderdale County Medical Society.)

Shuttleworth, John G., 102 South Pine Street, Florence, Ala., 35630. (Transfer from member Jefferson County Medical Society, to member Lauderdale County Medical Society.)

COUNTY SOCIETY OFFICERS

Dr. P. J. Howard was elected to fill the unexpired term on the County Board of Censors of Dr. J. B. Thomas, Jr., who has moved to Texas. (Escambia County Medical Society.)

THIRTIETH ANNUAL MEETING THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The thirtieth annual meeting of The New Orleans Graduate Medical Assembly will be held March 6, 7, 8, 9, 1967, headquarters at The Roosevelt Hotel.

Nineteen outstanding guest speakers will participate and their presentations will be of interest to both specialists and general practitioners. The program will include fifty-one informative discussions on many topics of current medical interest, in addition to clinicopathologic conferences, symposia, medical motion pictures, round-table luncheons and

technical exhibits. This program is acceptable for thirty and one-half (30½) accredited hours by the American Academy of General Practice.

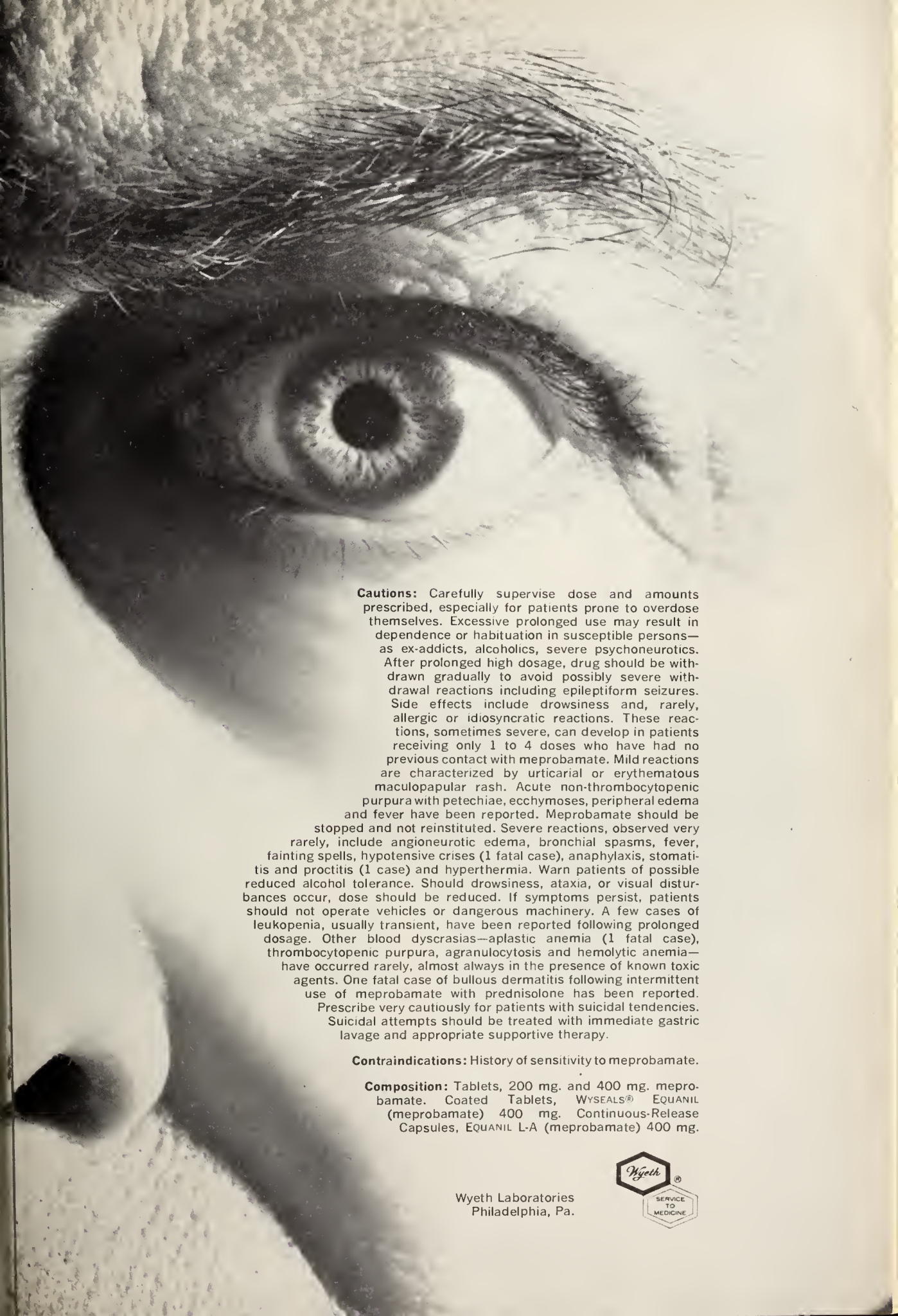
An interesting and enjoyable program of entertainment for visiting ladies has been planned.

For information concerning the Assembly meeting write Secretary, The New Orleans Graduate Medical Assembly, 1430 Tulane Avenue, Room 1528, New Orleans, Louisiana 70112.



3 a.m.

**Sleep-interfering
anxiety and tension
can usually be relieved
with
EQUANIL[®]
(meprobamate) Wyeth**



Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories
Philadelphia, Pa.





Taking a coffee break at the recent Anniston Medical and Surgical Seminar are Dr. John W. Kirklin, left, a member of the staff of the University Medical Center, and Dr. Walker Reynolds of Anniston.



Dr. William J. Atkinson, Jr., left, and Dr. J. S. Tarwater take notes during a recent meeting of the Allied Medical Services Committee at the Central Office.



Planning the second annual Congress of Medicine and Pharmacy were, seated, from left, Mrs. Launia Barranco, Dr. Carl Grote, Jr., and Mr. Lester Thagard; standing, from left, Mr. William Davoren, Mr. Ted Jennings and Dr. L. D. McLaughlin.



No, this isn't Matt Dillon under that ten gallon hat. It is Dr. Robert Parker of Montgomery, chairman of the Board of Censors, during a coffee break at the Central Office.

Look how many ways

Thorazine®

brand of

chlorpromazine

can help

	Tranquillizer	Potentiator	Antiemetic
Agitation	●		
Alcoholism	●		●
Anxiety	●		
Cancer patients	●	●	●
Severe neurodermatitis	●		
Drug addiction withdrawal symptoms	●		●
Emotional disturbances (moderate to severe)	●		
Nausea & vomiting	●		●
Neurological disorders	●		
Obstetrics	●	●	●
Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
Surgery	●	●	●
Tetanus	●	●	

'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. **Contraindications:** Comatose states or the presence of large amounts of C.N.S. depressants. **Precautions:** Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. **Side Effects:** Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with

I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories 

TUBERCULOSIS AN IMPORTANT PUBLIC HEALTH PROBLEM

Tuberculosis remains an important public health problem in the United States despite a continuing decline in the number of deaths and new cases over the past decade. The age-adjusted overall death rate dropped from 15.0 per 100,000 population in 1952 to 4.3 in 1963, about 70 per cent. The reported new active cases of tuberculosis declined at a slower pace during this period, from 55.0 per 100,000 to 28.7, or 48 per cent. In 1964 the case rate dropped further to 26.6 per 100,000, but the number of reported new active cases remained above 50,000.

The table on the next page shows that each color, sex and age group shared in the decline in tuberculosis mortality during the period between 1951-53 and 1961-63. The greatest declines, amounting to about three fourths, were recorded among white and nonwhite females, while among males the declines were somewhat smaller, about two thirds. This trend widened the disparity in the tuberculosis mortality rates for the two sexes, especially among whites. Thus in 1961-63 the rate for white males was 5.7 per 100,000, more than three times that for white females, whereas ten years earlier this ratio was about 2½ to 1. Among the nonwhites the rate for males in 1961-63 was about 2½ times that of females, compared with a little less than 2 to 1 in 1951-53. The women's advantage was greatest at 55-74 years of age, 5 to 1 among white persons and over 3½ to 1 among nonwhites.

During the ten-year period the declines in mortality were greatest at ages under 35 years. Each color-sex group at these ages shared in reductions which ranged from 83 to 95 per cent. The current mortality rate from tuberculosis is very low at the younger ages, amounting to only 0.1 or 0.2 per 100,000 at ages 5-24 among whites. The smallest declines in mortality were recorded at ages 75 and over, 37 and 14 per cent for white and

nonwhite males, and 55 and 34 per cent among white and nonwhite females, respectively. Mortality from tuberculosis is increasingly concentrated at the older ages, particularly among older men, with nonwhites continuing to have distinctly higher death rates.

The 1961-63 death rate for nonwhite males, at all ages combined, was about 3½ times that for white males; for females the ratio was even higher—about 4½ to 1. Excess tuberculosis mortality among nonwhites is present over the entire range of ages; in 1961-63 it was most marked among males at ages 25-34; 10½ to 1. At ages 15-24 and 35-44 this ratio was more than 7 to 1. Nonwhite females showed the highest excess mortality, 9½ to 1, at ages 15-34.

New active cases of tuberculosis reported in the United States dropped from 85,607 in 1952 to 54,042 in 1963. Although the case rate declined by 48 per cent during this period, there was virtually no drop after 1961. In fact, the number of cases reported in 1963 was slightly greater than in 1962. This reflects mainly the situation among nonwhite males, for whom the number of new cases as well as the case rate rose significantly in 1963. As in the mortality experience, case rates are much higher for nonwhites than for whites and higher for males than for females. Specifically, the nonwhite male case rate in 1963 was 3½ times that for white males; for nonwhite females the rate was over 4 times that for white females. White males had a case rate twice that for white females, while among nonwhites this ratio was about 1¾ to 1. There has been little change in these relationships over the decade.

The recent increase in new active cases of tuberculosis is concentrated largely in the big cities. In 1964, twelve cities of more than 250,000 population each showed an increase over 1963.

TUBERCULOSIS

An important problem in the control of tuberculosis is the failure to detect new cases. A recent study in New York City showed that in 1960, among 4,699 new cases of active tuberculosis reported, 208 or about 4½ per cent were first registered at the time of death.* Further investigation verified that nearly half of these cases were active and communicable tuberculosis which had been undiagnosed and untreated prior to death. A significant number of undetected cases present a continuing risk to the community, particularly in congested metropolitan areas.

The attempt to control tuberculosis in the United States cannot be relaxed so long as a

sizeable reservoir of infection still exists. In 1965 an estimated 320,000 persons were enrolled on tuberculosis registers. Of this total about a third were receiving treatment for active tuberculosis. About 42,000 of them were in hospitals and sanatoria. About 63,000 were not hospitalized, being under medical care of private physicians or clinics. The chain of tuberculosis infection can be broken by maximum use of case-finding procedures, follow-up of cases and contacts, selective immunization, and prophylaxis.

*D. G. Simpson and A. M. Lowell, "Tuberculosis First Registered at Death." The American Review of Respiratory Diseases, Volume 89, February 1964, p. 165.

MORTALITY FROM TUBERCULOSIS

United States, 1961-63 and 1951-53

Sex and Age	Average Annual Death Rate per 100,000				Percent Decline	
	White		Nonwhite		Nonwhite	White
	1961-63	1951-53	1961-63	1951-53		
MALES						
All Ages*	5.7	17.0	19.3	60.1	66	68
Under 1	0.5	3.7	3.1	21.6	86	86
1-4	0.4	3.0	1.5	14.1	87	89
5-14	0.1	0.6	0.3†	2.9	83	†
15-24	0.2	2.5	1.5	25.1	92	94
25-34	0.8	7.1	8.4	55.2	89	85
35-44	3.1	16.2	22.1	79.9	81	72
45-54	8.8	32.4	35.7	114.9	73	69
55-64	18.9	52.2	55.6	139.5	64	60
65-74	32.5	68.1	79.6	137.9	52	42
75 and over	46.6	74.0	94.7	110.3	37	14
FEMALES						
All Ages*	1.8	7.0	7.9	33.3	74	76
Under 1	0.4	3.7	2.1	20.7	89	90
1-4	0.4	2.7	1.5	13.0	85	83
5-14	0.1	0.6	0.2	4.3	83	95
15-24	0.2	3.3	1.9	31.8	94	94
25-34	0.8	7.5	7.6	49.1	89	85
35-44	2.0	9.1	13.5	42.8	78	68
45-54	3.1	8.7	12.3	41.7	64	71
55-64	3.7	11.3	15.8	41.3	67	62
65-74	6.5	20.4	21.6	52.2	68	59
75 and over	14.9	33.0	29.3	44.1	55	34

*Adjusted on basis of the age distribution of the United States total population, 1940.

†Based on less than 20 deaths. Per cent decline not shown.

Note: Data for residents of New Jersey excluded in 1962-63.

Source: Reports of Division of Vital Statistics, National Center for Health Statistics.

Are Nursing Homes Firetraps?

Far too many nursing homes in this country are still death traps for the elderly, a fire protection expert warned.

The irony of it is that a protective system—automatic sprinklers—, which would substantially insure life safety in these buildings, can be installed for less than half the cost of wall-to-wall carpeting, according to Chester I. Babcock.

Technical secretary of the National Fire Protection Association, Babcock spoke at the concluding session of the association's three-day conference in Raleigh, N. C., attended by several hundred fire safety experts from the United States and Canada.

Citing 48 nursing home fires in the past 15 years each of which has cost an average of almost 10 lives, Babcock declared that progress in improving life safety conditions has been painfully slow, because "organized resistance has attempted to block regulations on the grounds that they were not needed or that the costs would be prohibitive."

Today, he said, "every state has at least

enabling legislation empowering the fire marshal or some other state official to regulate the fire safety of nursing homes."

In an increasing number of instances, these officials are requiring corrective measures and installation of automatic sprinkler systems, in accordance with recommendations of the Life Safety Code promulgated by the National Fire Protection Association.

Complete automatic sprinkler protection has a near-perfect record of extinguishing or controlling fires in their early stages, Babcock explained. This makes them ideal for nursing home protection, because "tragedy after tragedy has demonstrated that the elderly and infirm who occupy these homes cannot be carried to safety in time."

High cost is frequently cited as a reason for not installing this protective equipment but, said Babcock, a survey has shown "that the average cost of a sprinkler system installation is around 50 cents per square foot—less than half the cost of installing wall-to-wall carpeting!"

Sugar For Bedsores

Ordinary granulated sugar poured into chronic bedsores and other ulcers has healed 41 such lesions in 15 patients, reports Dr. James W. Barnes, Jr. of the Glenn Dale (Md.) Hospital. He pours the sugar into an ulcer that has been cleansed with an antiseptic solution, covers the wound with gauze pads, paints tincture of benzoin on the surrounding skin, and applies waterproof tape. Best results are produced by repeating the cleansing, rinsing, adding more sugar and changing the dressing every 24 hours until the ulcer heals. Healing time ranges from 17 to 140 days, averaging 54. The sugar treatment works equally well on decubitus ulcers, varicose ulcers, skin graft sites and other slow-healing dormant wounds, and may be used for either hospitalized or nonhospitalized patients.—*Med. World News*, Dec. 17, pp. 68, 72.



"We'll forego the ink-blot test for this session."

Reprinted from "The New Physician."

Estomul does what standard anticholinergics fail to do—it provides a continuous climate for ulcer healing, eliminating the peaks and valleys of ordinary therapy. It is a comprehensive formulation providing sustained antisecretory effect on gastric activity. A recent study¹ reported a 56% satisfactory response with a maintenance schedule of Estomul in patients refractory to all previous medication. In less difficult peptic ulcer patients, a second study² noted a 94% satisfactory response. Both studies confirmed this clinical improvement radiologically. And both reported unusually prolonged reduction of basal secretion. With a maintenance course of Estomul therapy you can provide this continuous climate for healing in your own peptic ulcer patients.

A continuous climate for ulcer healing

(not simply episodic reduction of secretion or motility)

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

January, 1967

No. 7

"Cardiac Resuscitation"

Glenn L. Foster, Gus G. Casten and T. J. Reeves*

Introduction

The specter of sudden death has haunted physicians and laymen from the dawn of time. It has usually been considered irreversible, and in the folklore of our culture has been accepted without question.

In the operating room, however, "sudden death" was not always an irreversible event. Sudden cessation of heart beat during induction of anesthesia was often prevented from terminating fatally by the surgeon's opening the chest and massaging the heart. The availability of trained anesthesiologists assured adequate ventilation and many of these patients returned to a long and productive life.

Although direct cardiac massage was advocated by some as such a valuable technique that it should be taught to everyone, it achieved very little use outside of the operating room. It was not until 1960 when Kouwenhoven, Jude and Knickerbocker¹ demonstrated the effectiveness and feasibility of external cardiac compression that a generally applicable method of restoring the circulation was available.

The reversion of many dangerous or lethal cardiac arrhythmias is now effectively accomplished by the administration of elec-

trical countershock. The demonstration by Zoll² that such shock could be administered safely and efficiently through the intact chest was a major contribution. The development of effective direct current defibrillators by Lown and his colleagues³ must also be considered as a significant advancement. There seems to be little doubt that such d. c. shock is less injurious to heart muscle than is an equally effective a. c. shock.

These two fundamental developments, external cardiac "massage" and transthoracic electrical defibrillation, have allowed highly effective cardiac resuscitation in a variety of circumstances. Even in the presence of an acute myocardial infarction resuscitation is frequently effective. Not only is the heart beat restored, but in a very significant percentage of such patients subsequent recovery is uneventful. In one recent series, seven "good risk" patients (No shock or failure) with acute myocardial infarction experienced ventricular fibrillation in the Coronary Intensive Care Unit of the Royal Victoria Hospital of Melbourne, Australia. All seven (100%) of these patients were resuscitated and all seven were alive six months after incident.⁴

It is obvious that lives can be saved, in patients whose hearts are, in the words of Dr. Claude S. Beck, "too good to die."

Time is Life

The success of resuscitative procedure is directly proportional to the rapidity with

From the Department of Medicine, Medical School, University of Alabama. Supported by B. S. S. Grant # CD-00054.

*Alabama Heart Research Professor.

which resuscitative procedures are instituted. A resuscitation attempt within 30 seconds after effective cardiac action ceases will have an excellent chance of restoring the patient to his pre-arrest condition. If two minutes elapse before resuscitative measures are undertaken, the chances are even that the victim will succumb in this episode. If five minutes delay occurs before resuscitation is attempted, not only will it be extremely difficult to resuscitate the victim, but irreversible brain damage will frequently occur in those patients who do survive.

It is because of the urgency of instituting immediate resuscitative measures that every physician in the actual practice of medicine should be thoroughly competent in cardiac resuscitation. Since the techniques are easily learned and the potential salvagability is great among otherwise healthy individuals who fall victim to near drowning, fire, smoke and trauma, it is desirable that police and fire personnel as well as physicians be familiar with the technique of external cardiac compression and mouth-to-mouth ventilation. The heart disease control program of the Bureau of State Services, the American Heart Association and other concerned agencies have made significant strides to educate the medical and paramedical communities as well as policemen, ambulance attendants, firemen, and lifeguards.

Required Equipment

Every accredited hospital should be equipped for cardiac resuscitation. This should include one or more "resuscitation crash carts" providing in a single readily transported and immediately accessible vehicle all of the apparatus necessary for optimal resuscitation (see Table I) and defibrillation. The total cost of such a cart is small indeed, compared to the potential gain to be realized. When one considers the cost of (all too frequently unnecessary) laboratory procedures, the truth of this statement becomes evident.

The cart should be provided with the following essential items:

TABLE I

"Crash Cart Equipment"

- I. Equipment
 - A. Airways—Resuscitube and oropharyngeal airways, face mask (optional). Ambu Bag.
 - B. Defibrillator—Pacemaker. Preferably "synchronized" D. C. (capacitor discharge) with external electrodes and "thumb switch" to activate discharge.
 - C. Electrode paste—(Or a plastic squeeze bottle of saline with 4 x 4 sponges).
 - D. EKG with oscilloscopic display.
 - E. Mechanical device for cardiac compression.
 - F. Thoracic bedboard.
 - G. "Venous cutdown tray" with multiple venous cannulae plus nerve hook to facilitate cannulation of vein.
 - H. Intracardiac needles (6), 3½ inch, 22 gauge.
 - I. Suction apparatus with appropriate catheters.
- II. Emergency Drugs
 - A. 500 cc bottles, 5% D. W. (4).
 - B. 500 cc bottles, normal saline.
 - C. Microdrip sets for above.
 - D. Norepinephrine (12 ampules—4 mg each).
 - E. Isoproterenol norepinephrine (Isuprel)—HCL (6 ampules, 0.2 mg. each).
 - F. Epinephrine. 1-1000 (6 ampules—1.0 mg. each).
 - G. Metaraminol (Aramine) (10 vials—100 mg/cc).
 - H. Calcium chloride (5 ampules—10% solution, 10 cc each).
 - I. Procaine amide (Pronestyl) (5 ampules—100 mg/cc, 10 cc each).
 - J. Sodium bicarbonate (10 ampules—44.6 mEq. each).

- (1) Oro-pharyngeal *airways* (preferably both "Resuscitubes" and simple "S" tubes, the latter for use in conjunction with a bag and mask ventilator).
- (2) A *bedboard*—a plywood board or tray approximately 2 feet x 3 feet to slip under the back of the patient to provide rigidity for external compression.
- (3) A "*D. C.*" *defibrillator*—equipped in addition with both internal and external Pacemaker circuits.

- (4) An *electrocardiograph* — preferably equipped for oscilloscopic display.
- (5) *Drug tray*—including adequate supplies of the injectable forms of sodium bicarbonate, procaine amide (Pro-nestyl), epinephrine, Isuprel, calcium gluconate, Aramine, Vasoxyl, Levophed, Cedilanid and hydrocortisone.

Table II summarizes the indication,

dosage and the method of administration of these important drugs. Such a table should be enclosed in plastic and attached to the crash cart for the convenience of the responsible physicians who may not and need not be ordinarily acquainted with the details of such drugs.

- (6) *Suction apparatus with appropriate catheters.*

TABLE II

"Drugs for Resuscitation"

Drug	Form	Dosage	Indications and Comments
1. Metaraminol (Aramine)	Ampules, 1 cc Vials, 10 cc 10 mgm/cc	5-10 mgm I.M.	Give I. M. stat while cut-down being placed.
2. Sodium bi-carbonate	Ampules, 50 ml (44.6 mEq)	45-90 mEq. Repeat q. 5-8 min. or more often according to arterial pH	Should be given to all patients not responding to first series of shocks; or to all patients if 3 min. or more elapsed prior to first shock.
3. Epinephrine	Ampules, 1 mg. in 1 cc	0.5 mg intracardiac or I. V. (dilute 1 cc of 1/1000 solution to 10 cc with saline). Give 5 cc of diluted solution.	1. Give after 2-3 minutes cardiac compression if norepinephrine not started. 2. Repeat in 2-3 minutes if contractions ineffective or if fibrillatory waves fine and slow. 3. Too much = ventricular arrhythmia.
4. Isuprel	Ampules, 0.2 mg in 1 cc	0.02-0.1 mg stat intracardiac or intravenous	1. Same indications as epinephrine. 2. Causes increased contractile force without vasoconstriction.
5. Norepinephrine	Ampules, 4 mg	16 mg in 500 cc, adjust drip rate to give adequate cardiac force.	Causes both vasoconstriction and an increase in contractile force. Too much = ventricular arrhythmia.
6. Pronestyl	Vials, 10 cc 100 mg/cc	200 mg (2 cc) at 100 mg/min I. V. q. 2 min PRN	For ventricular arrhythmia or recurrent ventricular fibrillation.
7. Calcium chloride	Ampules, 10 cc of 10% solution	5-10 cc I. V. or 3-6 cc intracardiac. Repeat q. 5-10 minutes.	Use if inadequate cardiac contraction persists after epinephrine or norepinephrine given.

Steps in Actual Resuscitation

The actual conduct of resuscitation obviously must depend upon the clinical setting in which the cardiac arrest occurs. If ventricular fibrillation develops during the course of cardiac catheterization in a modern laboratory, the first step is usually the delivery of an adequate shock from a "D.C." defibrillator after the catheter is removed from the offending site. This can ordinarily be accomplished within 15-20 seconds and under such circumstances artificial ventilation or external cardiac compression is not only not required but usually contraindicated as the first step because it may delay defibrillation. Similar rapidity of action may occasionally occur in patients with coronary heart disease in modern intensive care units. In any event, *the precise sequence of events normally depends upon the time that has elapsed prior to the initiation of resuscitative maneuvers, and upon the circumstances precipitating the arrest.* In ischemic heart disease, as in other situations, the arrest may be due to ventricular fibrillation or to ventricular asystole. If ventricular fibrillation develops in the absence of signs of cardiac failure or shock, the prognosis for reestablishment of an adequate circulation and ultimate survival is very good under optimal circumstances. Ventricular standstill is most apt to occur in patients with massive myocardial injury and is usually associated with shock or failure or both and carries a much graver prognosis than ventricular fibrillation. It may also occur, however, as the result of complete atrioventricular block without such a grave implication. In either circumstance, a well developed plan of resuscitation is highly desirable.

At least six persons are desirable for the optimal implementation of a resuscitation attempt:

- (1) A physician to direct the procedure;
- (2) One person for artificial ventilation;
- (3) One person for external cardiac compression;
- (4) One person to do venous cutdown and

to give and adjust the rate of intravenous medications;

- (5) One nurse to prepare medications and precisely record drug administration and details (time, voltage, number of electrical shocks). She should be instructed to remind the senior physician of the stage of the resuscitation relative to the planned operation
- (6) One nurse to "circulate," to connect electrical apparatus, attach EKG electrodes to patient, to monitor the electrocardiogram with the physician, and to keep an accurate sequential record of all drugs and procedures. It is obvious that a successful resuscitation does not require this number of people. However, the success rate in a given hospital will be increased by the presence of such an optimal team.

The actual sequence of resuscitation includes:

I. *Diagnosis:* The diagnosis of cardiac arrest can generally be established by professional or trained personnel within a period of a few seconds. Since all attempts of cardiac resuscitation are based on the premise that the period of reversibility exists *only for a period of 4-6 minutes* from the time of arrest to the time of the establishment of effective cerebral circulation (adequately oxygenated), it is evident that precious time must not be wasted in elaborate documentation of the precise mechanism that exists. Loss of consciousness with pallor, gasping respiration or apnea, absence of major vessel pulsation and/or absence of heart sounds, is all that is required. It is important, however, to habitually note the exact time of the onset of arrest whenever possible. The pupils should also be inspected and the degree of dilatation noted. The pupils begin to dilate approximately 45 seconds after cessation of cerebral blood flow. The dilatation is complete approximately one minute and 45 seconds later. As emphasized by Messer, *"complete pupillary dilatation indicates that a minimum of nearly half the period of potential reversi-*

bility has elapsed."⁵ It is to be emphasized that time should not be wasted in removing clothing for auscultatory efforts at such a time. Electrocardiographic confirmation is desirable only if it is already attached to the patient but is contraindicated at this stage of the resuscitation if it results in a loss of time in definitive treatment.

II. *Call for assistance and resuscitation equipment.* Again, time should not be wasted in this effort; however, definitive therapy requires more than one person and the special equipment previously listed.

III. *Strike the precordium.* Occasionally, a single sharp blow to the precordium will effect a dramatic return of the circulation. Obviously this maneuver will be effective only if the mechanism of arrest is ventricular standstill. It may be necessary to repeat the blow at intervals until external electrical pacing can be initiated or until the excitability of the heart can be restored by intravenous Isuprel or epinephrine.

IV. *Begin artificial respiration.* In most circumstances, artificial ventilation should be initiated immediately. Exceptions are to be recognized as noted above. It is imperative that adequate ventilation be initiated without waiting for the arrival and insertion of endotracheal tubes or even oropharyngeal airways unless they are immediately at hand. Under no circumstances should vital seconds be wasted at this time in an attempt at endotracheal intubation *even by trained anesthesiologists*. Adequately trained personnel can establish an adequate airway and begin effective respiration within 10-15 seconds if mouth-to-mouth or mouth-to-tube maneuvers are chosen. In contrast, 2-3 minutes may be wasted in an attempt at endotracheal intubation under the conditions usually existing. During this period compression is usually suspended at the request of the anesthesiologist. Since 1-2 minutes have usually elapsed already prior to arrival of the anesthesiologist, the primary chance for recovery with an intact cerebral cortex is lost while intubation is attempted!

If mouth-to-mouth or mouth-to-tube ventilation is to be initiated, the following sequence should be observed:

- (1) Clear the airway of all foreign material, including food and dentures.
- (2) Hyperextend the head on the neck. (Bend the neck back).
- (3) Pull the jaw forward.
- (4) Insert the oropharyngeal tube if available.
- (5) Occlude (pinch) the nostrils.
- (6) Cover lips of victim, either with the lips of the operator or the flanged cup of the Resuscitube*.
- (7) Take a deep breath and exhale into the mouth (or tube) of the patient with sufficient force to produce *an easily visible expansion of his thorax*. If excessive force is required, the airway is obstructed usually from an inadequately extended head or an inadequately supported jaw.
- (8) Repeat at the rate of 12-18 ventilations per minute, *without interrupting the external compression*. If only one person is attempting the resuscitation, he should complete only 5-6 effective ventilations before initiating external cardiac compression.

V. External cardiac compression: *The first step in effective external compression is to secure rigid support for the back of the patient.* A large serving tray may be slipped behind the back of the patient in bed, in the absence of a specially designed bedboard. Alternatively and in many cases preferably, the patient may be lifted off the bed and placed supine on the floor. As soon as the initial ventilations have been completed (see above) the compression should begin.

The heel of one hand should be placed over the lower portion of the sternum just above the xiphoid process with the heel of the other hand placed on the dorsum of the

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first. The adjacent costal cartilages should be carefully excluded. Compression is best accomplished by a synchronized dorsiflexion of the hand on the wrist and thrust of the entire arms using the weight of the body. This maneuver is easily learned with a mannikin (Resusci-Anne**). The sternum should be displaced with moderate acceleration a distance of 1½ to 2 inches toward the spine. Cessation of compression should be abrupt to allow the thorax and heart to "spring back" to a resting condition, thus facilitating cardiac filling. The duration of the compression phase should be about one third of the cycle length. The rate of compression should be approximately 60-80 cycles per minute.

We have observed that most inexperienced older physicians, nurses and laymen err in the direction of inadequate force and acceleration, and that inexperienced younger physicians tend to err in the direction of excessive force. It is relatively easy to lacerate the lungs and/or liver, and to produce cardiac contusions by excessively vigorous compression. Conversely, inadequate compression rapidly wastes the moments of potential restoration. It is, therefore, highly desirable to have had meaningful practice on a mannikin prior to the time of crisis.

The adequacy of the artificial circulation and ventilation may best be confirmed by observing a constriction of previously dilated pupils and by purposeful muscular movements of the patient. In a number of personally observed instances the patient has actually awakened during the process of external compression while still maintaining ventricular fibrillation. Under these exceptional conditions the necessity for artificial ventilation ceases. Mercifully, a transient slowing of the compression rate or vigor instantly allows the return of unconsciousness. It is difficult to evaluate the volume of the radial, brachial or carotid pulse, though a large femoral pulse may be clearly felt in many patients with adequate cardiac compression.

VII. *Definitive Defibrillation* can be considered with the arrival of assistance and equipment. Since under the most optimal circumstances of artificial circulation and respiration the cardiac output and coronary flow can be maintained only at critically reduced levels, the following should be initiated almost simultaneously, but with these approximate priority.

A. Connect the defibrillator to the power source; connect the "shock" electrodes to the machine and coat them with electrode paste. Alternately, one may use saline soaked 4 x 4 sponges. This minimizes the danger of "arcing" along the chest wall from "Bridges" of electrode paste. Adjust the power setting for the desired initial voltage (200 watt-seconds). This should be done by the circulating nurse immediately so that it will be instantly available when needed.

B. Give Metaraminol (Aramine) 5-10 mg I. M. to simultaneously increase myocardial contractile force (contractility) and to increase arteriolar constriction. The extreme diminution in perfusion of all capillary beds that accompanies the reduced cardiac output of external cardiac compression following arrest rapidly results in maximal arteriolar dilatation. Consequent to both the reduction in output and the expansion of the intravascular bed, the mean arterial pressure drops to critical levels. Since coronary flow tends to parallel aortic pressure, under these conditions the drop in pressure produces further hypoxic injury to the myocardium with additional impairment of myocardial contractility. Since the ventricles are unlikely to defibrillate and then sustain effective contractions under such adverse conditions, it is highly desirable to repair both deficits. While the metaraminol may not be effectively absorbed during cardiac compression, it may have surprisingly beneficial effects and should be given while more direct routes of administration of cardioactive drugs are being prepared. Others prefer to give epinephrine or Isuprel directly into the cardiac chambers at this point in the place of resuscitation. We prefer to continue the

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compression and ventilation without interruption during the first 1-2 minutes of the resuscitation attempt to patients with ischemic heart disease.

C. *Connect the patient to the electrocardiogram.* The second function of the circulating nurse should be to connect the EKG machine to the power source and turn it on to warm up. She should then apply the electrodes, using standard technique and hook them to the lead cable. If an oscilloscopic attachment is available, the necessary adjustments should be made so that the electrocardiographic wave form is visible to the senior physician. Lead II is generally optimal. The physician should establish the precise diagnosis as soon as the waveform appears, either on the oscilloscope or on the tracing. If ventricular fibrillation is present he should decide whether the fibrillatory waves are fine and slow (bad) or large and fast (good). In the former circumstance, more effective massage plus cardioactive drugs are highly desirable prior to electrical shock. Other rhythms may be present, each requiring specific consideration.

D. *Electrical shock should be given after one or two minutes of effective compression* if "arrest" continues *regardless of the mechanism and without waiting for electrocardiographic confirmation of ventricular fibrillation.*

The likelihood of resuscitating the victim drops with increasing rapidity after the onset of cardiac arrest. Following the initiation of ventilation and compression, the organism returns toward but not to the condition existing immediately before the onset of the arrest. The reversibility of the arrest then gradually declines as a result of all the consequences of the borderline perfusion that can be established under the best of circumstances. It is, therefore, desirable to administer the first shock as soon as possible after effective ventilation and circulation have been restored. It should be obvious that the actual time course of "potential reversibility" may be influenced by many variables, including the primary cause of the episode, the

time of onset and the adequacy of the ventilation and compression, the biochemical (including pharmacologic) state of the patient.

The initial shock level should be 150-250 watt-seconds (or joules) if a D. C. defibrillator is available. If an A. C. instrument is used, 450-500 volts with a duration of 0.15-0.25 second should be given. The defibrillator electrodes (properly coated with electrode paste) should be firmly applied to the chest, one at the apex, and one over the upper sternum. *All personnel* should stand clear and the first shock given. If a D. C. instrument is employed, there is no necessity to disconnect the EKG as it is with an A. C. defibrillator. If the fibrillation continues, give one additional shock at 400 watt-seconds before resuming compression and ventilation. Under these circumstances the probability is very great that pharmacologic help will be required to effect successful defibrillation.

E. A *venous cutdown* should be done by the first physician to arrive after ventilation and compression have been adequately initiated. All physicians should be trained in this simple procedure. The optimal site is usually at the basilic vein in the antecubital fossa because it allows insertion of a large central venous line for rapid infusion of hypertonic solutions as well as measurement of the central venous pressure on a spinal fluid manometer. An alternate site includes tributaries of the great saphenous vein at the ankle.

F. *Sodium bicarbonate solution* should be given as soon as the "cutdown" is established. The initial dosage is 45-90 mEq. given over one to two minutes. An additional 45 mEq. (1 ampule) of bicarbonate should be given each 5-6 minutes that artificial ventilation and circulation are required. The exact dosage should be gauged on the duration of arrest and the state of the patient, i. e., completely dilated pupils would be an indication for the larger dose as would be a large patient. In the few patients personally observed in which arterial pH values have been obtained, persistent acidosis rather than alkalosis has been the rule *after* the initial in-

jections of bicarbonate solution have been given.

G. *Norepinephrine* solution in the concentration of 16 mg. (4 ampules) per 500 cc 5% dextrose in water should follow the NaHCO_3 . The drip rate (by microdrip control) should be regulated so as to produce a definite increase in the amplitude and frequency of the fibrillatory waves on the EKG. Fine slow waves indicate a persistent loss of myocardial contractile force and herald both difficulty in defibrillation and the probability of inadequate contraction even if synchronized excitation of the myocardial fibers defibrillation is achieved. Norepinephrine has the properties of increasing myocardial contractility (beta adrenergic stimulation) and increasing arteriolar constriction (alpha adrenergic stimulation). As mentioned previously (above) both actions are highly desirable in this situation.

H. *Intracardiac injections* of epinephrine or Isopropyl norepinephrine (Isuprel) should be given if the cutdown is delayed, if the intravenous norepinephrine does not produce the desired changes in the EKG or if effective ventilation and compression have been delayed. When used, care should be taken to insure that the injection is into a cardiac chamber, not into the myocardium. For this purpose a 3-3½ inch, 22 gauge spiral or cardiac needle may be used. The injection should be made through the 4th and 5th intercostal space lateral to the left sternal border into either the right or left ventricle. An alternative route is via the apex of the left ventricle, orienting the needle toward the spine (posteriorly) at the level of the lower thoracic vertebral bodies. Except in the hands of persons skilled in percutaneous left ventricular puncture the former route is easier and safer. Epinephrine, 1-1000 solution, is most frequently used. One cc of the solution from the ampule (1.0 mg) is diluted to 10 cc with saline, then 4-6 cc of the resulting dilute solution is injected. Isuprel is usually available as 0.2 mg/cc in 1 cc vials. One cc of this solution should be diluted to 10 cc with normal saline and 2-3 cc of the

diluted solution given. Either drug is acceptable. Their pharmacologic action is highly similar although Isuprel may have a relatively greater effect on contraction than on excitation, making it theoretically more desirable in this situation. Obviously active compression should be resumed to distribute the effective agent throughout the circulation prior to the electrical shock.

I. *The repeat electrical shock* should be given as soon as the norepinephrine or intracardiac medication has been allowed time for action while artificial circulation is being maintained. Generally one or two minutes of post-medication compression is most effective. The initial shock of 200 watt-seconds should be repeated at a higher setting (300-350 watt-seconds) if fibrillation persists. If the fibrillation continues, the compression and ventilation are resumed while the situation is being reevaluated.

J. *Procaine amide (Pronestyl)*, 250 mg (2.5 ml) may be given intravenously, especially if reversion was achieved with good contraction only to be followed by frequent ventricular extrasystoles, ventricular tachycardia or recurrent fibrillation.

It should be used in 100 mg. doses at 1-30 minute intervals to stabilize the ventricular rhythm after sustained defibrillation has been achieved. The total amount required may be as much as 1.0 gm (or more) in 30-40 minutes, although the smallest effective dose is desirable. Pronestyl, like quinidine, is a myocardial depressant, decreasing myocardial contractile reserve even in ordinary doses. Quinidine may be used in a very similar fashion. Since we believe it to be slightly more hazardous particularly when given intravenously, it is rarely used in our practice.

Lidocaine (Zylocaine) in an initial dose of 50 mgm (5 cc of a 1% solution) is also an effective antiarrhythmic drug and is particularly useful in hypotensive situations because it has less tendency than Pronestyl to reduce blood pressure. After an initial injection it

may be given in a continuous micro-drip I. V. infusion in a solution containing 1 to 4 mgm/cc. It has approximately five times the antiarrhythmic effect of Pronestyl (on a weight basis) but its duration of action is shorter—lasting approximately 10-15 minutes after I. V. injection.

K. *Calcium Chloride*. This agent may be effective as an additional cardiac stimulant after further response to the catechol amines seem unlikely. Its effect on the myocardium is very similar to these agents in that it increases the rate of contractile element shortening, and increases the maximal tension that the muscle is capable of generating while at the same time decreasing (at any given heart rate) the duration of contraction. It is believed to be the ultimate initiator of contraction, and its removal from the interior of the cell is closely related to relaxation. If too much of the drug is given, the heart will arrest in systole, and in smaller doses the rate of relaxation may be sufficiently decreased so as to markedly diminish the distensibility of the ventricle and consequently its ability to fill at a given venous pressure. It is therefore, a reserve agent not to be given immediately but not to be withheld too long.

If, after all the previous steps have been taken, ineffective ventricular contractions persist following defibrillation, or if defibrillation cannot be accomplished, especially if the fibrillatory waves on the electrocardiogram are still fine and slow, then calcium chloride should be given. Five cc of 10% solution of calcium chloride should be given slowly through the intravenous cutdown. If an intravenous line is not available, then 3-6 cc of the 10% solution should be given into a cardiac chamber. These doses may be repeated at 3-5 minute intervals, but with full recognition of the hazards described above.

VIII. *Treatment of Ventricular standstill or slow idioventricular rhythm*. As discussed earlier, the great majority of patients with ischemic heart disease suffering from cardiac arrest who can be resuscitated actually have

ventricular fibrillation. This is especially true of those patients not responding quickly to the pre-defibrillatory procedures (I-VI). Occasionally, however, a patient with complete heart block from acute myocardial infarction will have a critical reduction of cardiac output even though maintaining a very slow (10-20 beats/min) idioventricular rhythm. This rhythm may rapidly deteriorate into ventricular fibrillation. Defibrillation may result only in a restoration of the same rhythm. As an emergency measure intravenous Isuprel (0.6-0.8 mg. in 500 cc) may be given intravenously or directly into one of the cardiac chambers. If available, external pacing should be initiated with a pacing rate of 60-80 beats per minute.

If, in an arrest situation, external pacing at maximal voltage does not produce reasonably regular ventricular depolarization, an intramyocardial unipolar or bipolar electrode of fine spring steel may be inserted through a needle directly into the heart muscle and direct electrical pacing attempted using the circuit for internal pacing. Familiarity with this technique is desirable in personnel concerned with coronary intensive care units.

IX. *After-care*. The period after successful resuscitation and defibrillation is critical. Since the underlying disease which precipitated the catastrophe may well persist, there is a great tendency for the fibrillation to recur. Continuous monitoring of the cardiac rhythm is essential to allow proper adjustment of appropriate cardiac medications.

Frequently, costal cartilages have separated and/or ribs fractured. These injuries must receive appropriate attention. The possibility of aspiration pneumonia should be anticipated and prophylactic antibiotics should be started. Urinary output should be carefully followed and fluid intake gauged accordingly. Myocardial weakness may precipitate congestive failure, requiring the cautious administration of digitalis. The anti-

arrhythmic drugs may induce transient A-V block which must be recognized and appropriately treated.

X. Termination of Resuscitation Effort.

The decision to terminate efforts at resuscitation should be based on evidence of central nervous system and/or cardiac death or irreversible failure. Signs of irreversible brain damage are: (1) Fixed dilated pupils after effective ventilation and cardiac compression have been carried out for at least 8-10 minutes. This sign is of even greater significance if the pupils had initially constricted in response to artificial circulation and subsequently again become dilated and fixed. One should always be alert to the possibility of atropine-like drugs having been administered previously and this being the cause of the fixed dilated pupils. (2) Lack or loss of *any* efforts at spontaneous respiration or muscular movements after an equivalent time period, especially in the presence of maximal dilated pupils. (3) Other signs of cardiac "irreversibility" include complete absence of electrical activity or extremely fine fibrillation persisting after adequate ventilation, compression and the proper utilization of the drugs, as outlined above. The EEG (electroencephalogram) has been helpful in predicting the eventual outcome of an initially apparently successful resuscitation. A record that shows no cortical electrical activity on two tracings more than six hours apart indicated a very grave prognosis.

The findings of Lown that practically all life threatening "primary" cardiac arrhythmias in patients with acute myocardial infarcts can be prevented⁷ emphasizes the importance of adequate monitoring and appropriate preventive therapy. Until that ideal situation is realized, however, it is incumbent upon every physician to treat "sudden death" vigorously so that these hearts may have a "second chance to beat."

TABLE III

Summary of Cardiopulmonary Resuscitation Procedure

- A. Appraisal—Is there cardiac arrest? Check *quickly* by palpation and inspection.
- B. Breathing—Establish an airway and begin mouth-to-mouth ventilation.
- C. Circulation—Start external cardiac compression with the victim on a hard surface.
- D. Definitive Therapy while maintaining breathing and circulation.
 1. ECG diagnosis of arrhythmia—if available, but do not wait to—
 2. Countershock at 150 watt-seconds. Repeat if necessary.
 3. Venous cutdown for fluids and drugs:
 - a. Sodium bicarbonate—1 ampule for each 5 minutes of resuscitation.
 - b. Cardiac stimulants—Epinephrine, Aramine, Levophed or Isuprel.
 - c. Antiarrhythmic drugs—Pronestyl or Xylocaine as needed.
- E. After-care—
 1. Prevention of further arrhythmias—monitor the patient.
 2. Treatment of shock, congestive failure or electrolyte imbalance.

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Selection Of Operation For Duodenal Ulcer Gastric Resection Vs. Vagotomy And Pyloroplasty

Wyatt C. Simpson, M. D., FACS

Florence, Alabama

Despite (or because of) voluminous literature on the subject of the selection of operative procedure for intractable duodenal ulcer, it appears that two diametrically opposed schools of thought have developed:

- (1) The proponents of subtotal gastrectomy, with or without vagotomy; and
- (2) The proponents of vagotomy and pyloroplasty.

As we have been adhering to the latter school, it seemed appropriate last year to review, not only the literature, but also our modest personal experience with the two procedures in an effort to determine whether we should continue in school number two or revert to number one.

We have been using vagotomy and pyloroplasty as the operation of choice for only five years, so, for a long-time follow-up, we must rely on the experience of others. It will be noted (Table I) that the mortality in general for gastric resection is double that for the lesser operation; that leakage from the duodenal stump following resection in many reported series, averages close to 5 per cent; the dumping syndrome is reported to average

10 per cent following resection; weight loss or failure to maintain normal weight 5 per cent; and recurrence rate (although widely at variance in different reports) averages about 5 per cent for each of the two procedures.

We have compared our first 50 cases (Table II) treated by vagotomy and pyloroplasty with our last 50 treated by gastric resection; From the standpoint of I, duration of nasogastric suction (gastric retention); II, major complications attributable to selection of operation; and III, short term follow-up based on about 65 answers to the questionnaire. (Tables II and III.)

DURATION OF NASOGASTRIC SUCTION
TABLE II

	Gastric Resection 50 patients	Vagotomy and Pyloroplasty 50 patients
Average	4.8 days	3.7 days
Shortest	2 days	1 day
Longest	23 days	10 days
10 or more days	6 or 12%	1 or 2%

SUMMARY OF REPORTED SERIES
TABLE I

	Resection	Vagotomy and Pyloroplasty
Mortality	2.5%	1.2%
Leakage	4.5%	0
Dumping	10. %	0
Weight Loss	5 %	0
Recurrence	5 %	5%

In Table II, you will note it is apparent that the necessity for nasogastric drainage is prolonged 1+ days in the resection group as compared with the other. To anyone who has personally experienced the necessity of such drainage, this will be recognized as a bonus indeed—particularly when the extremes are noted in the ensuing three lines on the table.

Table III correlates with the reported average in Table I. Table IV, although based upon an insufficient number of patients,

followed (in the second group) for an insufficient period of time to evaluate the recurrence rate evidences significant trends.

**COMPLICATIONS ATTRIBUTABLE TO
SELECTION OF OPERATION**
TABLE III

	Gastric Resection 50 patients	Vagotomy and Pyloroplasty 50 patients
Stump Blow Out	2 (one death)	None

FOLLOW-UP (Personal Series)
TABLE IV

	Gastric Resection	Vagotomy and Pyloroplasty
Inability to gain weight	30%	none
Episodes of bleeding	3%	none
After meal discomfort	25%	25%
Episodes of diarrhea	10%	15%
Patient expressed satisfaction	80%	94%

For one thing, weight maintenance is no problem following vagotomy and pyloroplasty; episodes of bleeding have not occurred following this operation; post-prandial discomfort (fullness, etc.) has occurred with equal frequency; episodes of diarrhea (none of major proportions) have been somewhat, but not impressively more frequent in the vagotomy group; and patient expression of satisfaction with the operative results is approximately the same. Our questionnaire evidently was not worded in such a way as to provide answers to the question of frequency of the dumping syndrome in either group. It is to be noted that one patient in the resection group was not available to follow up because of death from stump blow-out.

Thus, we are able to conclude that pyloroplasty and vagotomy result in a 1. significantly lower mortality than gastrectomy; 2. morbidity significantly less; 3. stump blow-

outs are impossible; 4. recurrence rate and late complications not materially different and 5. resection can still be undertaken in those patients who do have recurrence.

Another factor which is not generally found in the statistical surveys but which has impressed us as being of considerable importance is the experience that we not infrequently have and which I trust is not unique in our practice, of operating on patients for acute upper gastro-intestinal bleeding with every expectation of finding duodenal ulcer and opening up the duodenum to find that there is no ulceration or at best, a very shallow one. Then one is faced with the decision as to whether to do a blind gastrectomy, close the abdomen doing nothing or do a vagotomy and pyloroplasty. Our experience in treating these patients with vagotomy and pyloroplasty has been most rewarding. We have had no recurrent bleeding and we have not subjected the patient to a great big operation.

Also we not infrequently have a patient come to the operating room with a good clinical history of intractable duodenal ulcer with reports from competent radiologists of the existence of a duodenal ulcer and we find that no ulcer is present. Then, too, we subject the patient to a vagotomy and pyloroplasty and do not feel that we have done a mutilating procedure and have not subjected the patient to an operation with increased morbidity and mortality; and we stand a good chance of having symptoms relieved by this procedure. There have been two cases, in fact, in which there was definite thickening of the pyloric sphincter and we felt that the symptoms were definitely attributable to pylorospasm and pyloroplasty alone was done. These patients have received relief.

From the foregoing, we feel justified in concluding that, where the mechanical factors do not make this operation impossible, vagotomy and pyloroplasty is the desirable first surgical step in the treatment of medically intractable duodenal ulcer.

New from Du Pont
Symmetrel
(Amantadine HCl)

the first oral chemical virostat for the prevention of influenza A₂



Influenza virus

*Protein shell enclosing
the core of nucleic
acid (RNA)—artist's
representation*

The incidence of influenza A₂. In this country, where influenza is one of the leading causes of morbidity, influenza A₂ (Asian) continues to be a serious medical problem. In 1957 influenza A₂ was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A₂ (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A₂ (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel[®] (amantadine HCl) means to you

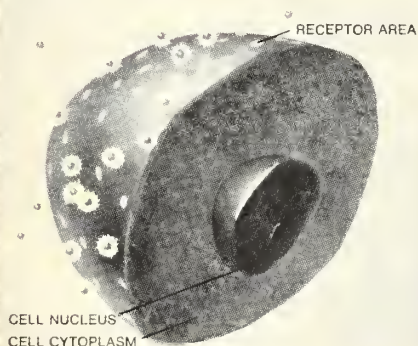
- ...the first and only oral chemical agent to prevent influenza A₂ (Asian).
- ...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.
- ...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.
- ...specifically active against all influenza A₂ viruses tested to date.
- ...not indicated for the prevention of influenzal or respiratory illness other than influenza A₂ or for the treatment of established disease.
- ...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel[®] means to your patient

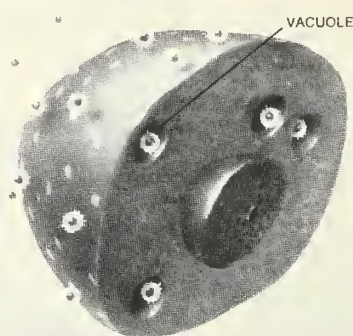
- ...possible immediate influenza A₂ protection when taken following suspected contact.
- ...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A₂ is especially hazardous.
- ...a high degree of safety in clinical use.
- ...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel[®]

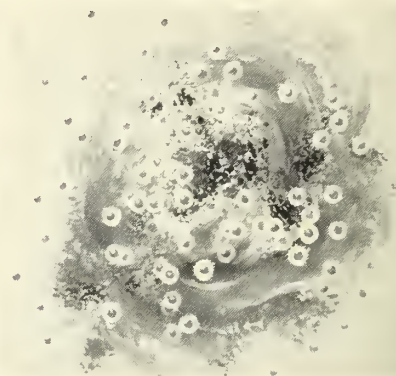
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas

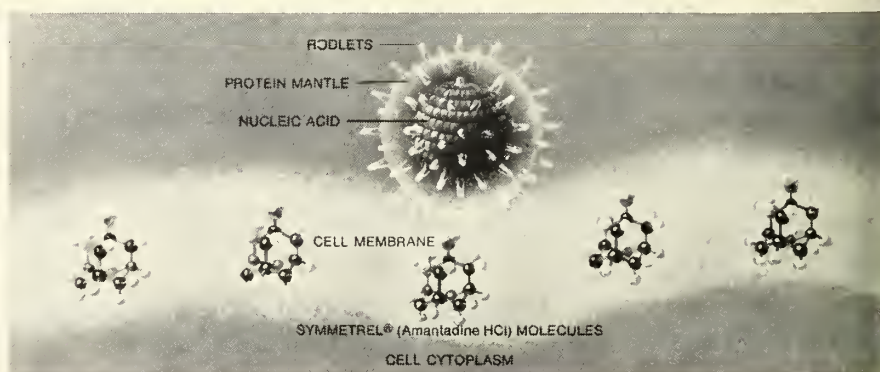
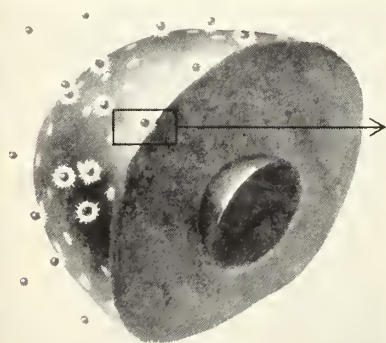


2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel[®] (Amantadine HCl) prevents virus invasion¹



Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., *Journal of Bacteriology* 90,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A₂ in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A₂. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A₂ or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such

as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: Adults: Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: Capsules: Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.

Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.



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(Amantadine HCl)

A molecular barrier to virus penetration

arrest diarrhea

in • gastroenteritis • acute infections



LOMOTIL[®]

Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride 2.5 mg.

(Warning: May be habit forming)

atropine sulfate 0.025 mg.







Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- Ulcerative colitis
- Acute infections
- Irritable bowel
- Regional enteritis
- Drug therapy
- Food Poisoning
- Functional hypermotility
- Malabsorption syndrome
- Ileostomy
- Gastroenteritis and colitis

Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months	3 mg. 	½ tsp. 3 times daily
6-12 months	4 mg. 	½ tsp. 4 times daily
1-2 years . . .	5 mg. 	½ tsp. 5 times daily
2-5 years . . .	6 mg. 	1 tsp. 3 times daily
5-8 years . . .	8 mg. 	1 tsp. 4 times daily
8-12 years	10 mg. 	1 tsp. 5 times daily

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE

Research in the Service of Medicine



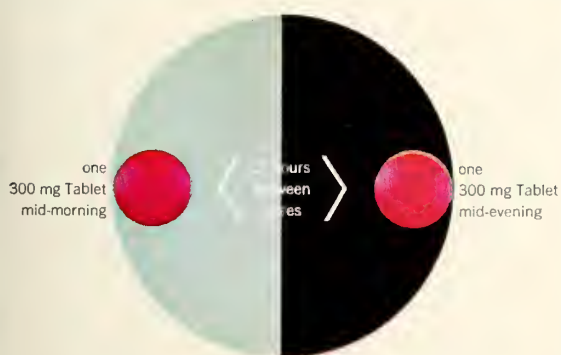
Why wonder about a drug

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DECLOMYCIN[®]

DEMETHYLCHLORTETRACYCLINE

is effective b.i.d.



It's made for b.i.d.

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essen-

tial. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; **Tablets:** film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

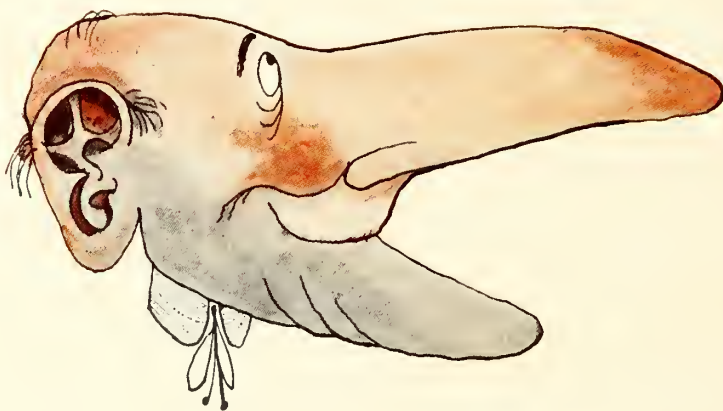
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- quickly relieves congested nose
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INDICATION: Nasal congestion. **CONTRAINDICATION:** Do not use in patients sensitive to small doses of sympathomimetic substances. **WARNINGS:** Prolonged or excessive use may cause rebound congestion. Use cautiously in patients with hyperthyroidism, coronary artery disease, hypertension, and diabetes. **CAUTION:** Do not shake Nasal Spray. Rinse Nasal Solution dropper or Nasal Spray tip in hot water after each use. No more than one person should use the same dropper bottle or nasal spray.

SIDE EFFECTS: Occasional local reactions: rebound congestion, slight burning or stinging, sneezing, dry nose. Occasional systemic effects: headache, drowsiness, lightheadedness, insomnia, palpitations. Overdosage in young children may produce profound sedation. **DOSAGE: Adults:** Nasal Solution—2 or 3 drops in each nostril every 4 to 6 hours. Nasal Spray—Squeeze rapidly once or twice in each nostril every 4 to 6 hours. **Children under 12:** Pediatric Nasal Solution—2 or 3 drops in each nostril every 4 to 6 hours. One drop should be used

in infants under 6 months. *Pediatric Nasal Spray*—Squeeze rapidly once in each nostril holding tube upright; repeat every 4 hours as necessary. **SUPPLIED:** OTRIVIN® hydrochloride (xylometazoline hydrochloride CIBA) Nasal Solution, 0.1%; dropper bottles of 1 fluidounce, bottles of 1 pint. Nasal Spray, 0.1%; plastic squeeze tubes of 15 ml. *Pediatric Nasal Solution*, 0.05%; dropper bottles of 1 fluidounce. *Pediatric Nasal Spray*, 0.05%; plastic squeeze tubes of 15 ml. Nasal Solutions contain either 0.1% or 0.05% xylometazoline hydrochloride, triethanolamine, hydrochloric acid, sodium chloride, and phenylmercuric acetate 1:50,000 as preservative in water. Nasal Sprays contain either 0.1% or 0.05% xylometazoline hydrochloride, potassium phosphate monobasic, potassium chloride, sodium phosphate dibasic, sodium chloride, and benzalkonium chloride 1:5000 as preservative in water. Consult complete literature before prescribing.

CIBA Pharmaceutical Company, Summit, N. J.

C I B A

Et Tu, Brute

Tinsley R. Harrison, M. D.

Birmingham, Alabama

The request from our President-elect to speak to you for ten minutes on Medical Ethics was a double surprise.

Firstly, there was, and is, a conviction, based on an association in one way or another, with physicians in seven different states, that no state profession is *less* in need of such a discussion. The reasons are not obscure. The basic law placing the total responsibility for health on the shoulders of the doctors of Alabama has produced in them a broad view and a strong sense of obligation. Equally, or perhaps more, important is the scarcity in our state of physicians that have been trained at mediocre medical schools.

The second surprise was Dr. Finney's opinion that ten minutes would be needed for the topic. William Osler, in summarizing his own personal ideals, used only one sentence to say everything that needs to be said about Medical Ethics. "The second ideal has been to act the Golden Rule, as far as in me lay, towards my professional brethren and towards the patients committed to my care." The principle admits neither expansion nor clarification; I shall add only a few details that most of us, and I, certainly, occasionally forget.

When we turn the Golden Rule inward and ask what we desire of the doctor who cares for a member of our own family, it is obvious that we expect him to feel an obligation not only for the health but also for the happiness of the patient. We wish him to take into account the quality as well as the quantity of life. He should combat both illness and suffering. This means a concern with symp-

toms. In regard to such gross and obvious symptoms as pain, nausea and dyspnea we have no worry. The doctor will regard alleviating them as a responsibility only slightly secondary to detecting and removing the underlying disease that causes them. But can we say the same for another symptom that is even more devastating, although often less obvious?

It is probable that *fear* causes more hours of human suffering than all other symptoms combined. It is unique in three respects. It is the only symptom that is likely to be continuously present for months or years; it is the only one that commonly spreads from the patient to his family; it is the one of all others that threatens the most precious quality we possess, which is hope. We may all profit by these lines from Charles Mackay:

A nameless man, amid a crowd that
thronged the daily mart,

Let fall a word of hope and love, un-
studied, from the heart;

A whisper on the tumult thrown,—a
transitory breath,—

It raised a brother from the dust; it
saved a soul from death.

Most physicians strive to induce a note of cheerfulness into illness and to inspire hope in their patients. But how often do we, despite good intentions, induce or aggravate fear by imposing restrictions, ostensibly for the patient's benefit, but actually prescribed because of our own subconscious insecurity and fear that we may be criticized if the patient should die unexpectedly. Obviously, major restraints are needed during acute illness and there can be little doubt that strong emotional stresses are harmful to most patients with chronic disease. But I am not familiar with any chronic disease in which a

This Paper presented as part of the Orientation Program at the 1966 Annual Meeting of MASA, in Mobile.

patient is harmed by modest physical exertion that is desired and enjoyed, and that produces no untoward symptoms such as dyspnea or pain during the effort, and no unpleasant aftermath such as exhaustion. On the contrary the delicious physical relaxation that commonly accompanies minimal physical fatigue is often a far better antidote for anorexia, insomnia and nervous tension than all the vitamins, tonics, sedatives and tranquilizers that overload the mail of the physician, and overwhelm the eyes and ears of his patients. Before telling a patient—and it should be emphasized again that the reference is only to chronic disease—that he must renounce his beloved fishing each of us should ask himself: "If I had the identical illness and liked to fish as much as he does, would I give it up? Would not the peace of mind derived from it lengthen my life? And if I make the assumption, for which there is no evidence whatever, that it would shorten my life slightly, wouldn't it be worth it? Of course, I shall insist that he do what I would do, i.e., always wear a life jacket and have a companion in the boat. And, in any case, since I must necessarily impose some 'can'ts,' his morale needs a few counteracting 'cans'." In offering long-range advice about such matters, we shall do well to cultivate the humility that stems from the lines of Browning:

"Tis an awkward thing to play with souls,
And matter enough to save one's own.

There are few prescriptions that bring as much satisfaction both to the patient and his doctor as the positive instruction to do—subject to proper precautions—something that the patient strongly desires to do, that is harmless, and that he had previously deferred because he—or, more often, his wife—had feared it might be detrimental to his health.

The second aspect of medical ethics is concerned with the relation of a physician to his professional colleagues, and has been the source of endless discussions at medical meetings and the occasion for all sorts of complicated and essentially meaningless

resolutions and even by-laws. It too can be reduced to the simple matter of guidance by the Golden Rule. But here, in theory at least, there is one important qualification. When there is a conflict between responsibility to the patient and to a fellow doctor, the former takes precedence. We must put first things first, and we all know that medicine is primarily for patients—not for doctors. When it is absolutely essential for the patient's benefit that we be critical of a colleague we should not hesitate, provided we are certain that we are not guilty of self deception, and also provided that our criticism is couched in exactly the language that we would desire the colleague to employ if our roles were reversed. Actually, this dilemma is so unusual as to be almost nonexistent. I can recall, during my own forty-four years as physician, only two instances in which it was necessary to voice, in response to a direct question, even minor criticism of a colleague in good professional standing. I readily confess to and do not apologize for scathing remarks made repeatedly about charlatans, a very few of whom happened to hold medical degrees. Even so, such remarks have usually been aimed at the cult, rather than at the individual.

In regard to one's conduct towards one's colleagues, we may again profit from the advice of William Osler, who tells us that the surest protection against an erring tongue is a deep and sincere humility. ". . . absolute truth is hard to reach in matters relating to our fellow creatures . . . errors of judgment must occur in the practice of an Art which consists largely in balancing possibilities:—start, I say, with this attitude of mind and mistakes will be acknowledged and regretted . . . this grace of humility is a precious gift. When . . . you summon up the remembrance of your imperfections the faults of your brothers will seem less grievous . . . The wrangling and unseemly disputes that have often disgraced our profession arise in a great majority of cases, on the one hand, from this morbid sensitiveness to the confession of error and, on the other, from a lack

of brotherly consideration and a convenient forgetfulness of our own failings."

The occasional frustrations that beset the life of a teacher are far outweighed by the rewards. Among the latter is the deep satisfaction the teacher derives from the accomplishments of his pupils, and especially when his own opportunities for future personal achievement begin to recede as a consequence of advancing years. During the second World War, I had occasion to visit several military hospitals in the course of a three-day tour with the late Dr. Walter Bauer, a life-long friend. He was then Chief Medical Consultant for the Eighth Service Command and shortly afterward was appointed Physician-in-Chief of the Massachusetts General Hospital. On the first two evenings, as we discussed the events of the day—the contrast between the mediocre and the first-class care we had observed—he asked me which of the several wards we had visited exhibited the highest standard of medicine. In each instance his reply to my selection was, "Of course, Tinsley, I trained that ward officer, a Harvard man and one of our former As-

sistant Residents." When, at the end of the third day, he asked the usual question I countered by asking him which young doctor *he* deemed to be the finest of all—not of that one day only but of the whole three-day trip. He replied, "There is no doubt about it. That chap on the second ward we visited this morning does the best work of any man we have seen and for that matter he is the most outstanding officer on any medical ward in the entire Eighth Service Command." It was a delicious triumph to be able to say, "Naturally so, Walter, J. O. Finney is a Vanderbilt man and *my* pupil."

During the past 16 years there have been rather numerous patients who have been seen by both Dr. Finney and me. In a small—indeed very small—number we have disagreed about the diagnosis. Several times a subsequent operation or necropsy has been done. The usual result has been a confirmation—not of my opinion—but of his. I trust you will agree with me that such behaviour toward his former teacher on the part of our President-elect is ungracious, inconsiderate and disloyal. Indeed it is positively unethical!

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ANNUAL SESSION

JEFFERSON DAVIS HOTEL

MONTGOMERY, ALABAMA

APRIL 20-21-22, 1967



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When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes distressed about her condition.

She will breathe easier when you prescribe Novahistine LP.

Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the morning and repeated in the evening will usually keep air passages clear for 24 hours.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention.

Caution patients who operate machinery or motor vehicles that drowsiness may result.

Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

 **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

NOVAHISTINE[®] LP

For relief of nasal congestion.

Saxon

Alabama's Physician Shortage Grows More Acute

"From opportunity, incentive and self-
help comes progress;
From the seeds come the harvests."

Never before has the world known so much about the human body, and so much about man's potential ability to care for that body. Also never before has the world's peoples been more aware of the growth that has taken place even in the remotest outposts of civilization as scientific and health measures are carried to them. Likewise, never before have physicians had so much offered them as they start out in life to establish their practice.

The days when a physician could practice from the contents of his saddle bags have long since passed into obscurity. In the past, it was thought that each small town, each gathering of families, must have its own doctor. The past annals of our history tell us of many experiences of the country doctor who braved rain, sleet, snow, storms, and floods to travel many miles by horseback, sometimes even on foot, to take his knowledge of healing to a backwoods community.

This picture has changed tremendously with the advent of fast and modern transportation. Today physicians are not needed in every tiny hamlet, village, or town. Thus the general practitioner of today has located himself so that he can do the most good for the greatest number of people; and he is able to reach more people in less time, with more at his command, than a patient who was only two miles away 60 years ago.

The demands of modern medical practice require that the physician have access to good medical facilities—that he have at his command the diagnostic tools of modern medicine—and it is the desire of every physician to put these tools to work in a functional workshop that is well-designed and adapted to his special skills. It is a matter of natural pride that a physician desires to conduct his practice from a geographic loca-

tion that will enable him to make the best use of his time and that will enable him to meet the community's needs for the highest possible standard of service.

The young physician's needs are varied as he approaches the time to choose a place to practice. Foremost he will wish to practice in an area which needs medical service, and in which he will be able to earn an adequate living. Next, he will want to practice where the community exhibits and demonstrates its needs, especially if these needs are presented in a warm spirit of evident co-operation and friendliness.

In order that young physicians who are completing their medical training and are concerned with the problem of a place to set up their practice, may have firsthand information at their disposal, the Committee on Public Relations and Economics of the Medical Association of the State of Alabama instituted a Physician Placement Service in 1954. This important phase of this committee's work has become one of the most active and continuous programs under its purview.

The Physician Placement Service grew from the small beginning of a letter or two directed to the State Health Department inquiring about locations in Alabama to become almost a full-time job in attempting to keep the physician in touch with communities and towns seeking the type of medical service that the physician has prepared himself to offer.

Alabama's physician shortage is growing more and more acute as the state's economic picture improves. Her vast medical complexes and space centers in the major cities have contributed to draw more people to the state, but the physician ratio has not improved. Figures show that the ratio of Ala-

bama is now one doctor to 1,420 people (1:1420) in comparison with the ratio of one doctor to 1,395 in 1964 (1:1395). This compares with the 1960 figure of one doctor to 1,374 people (1:1,374) thereby showing a decrease in physician-population ratio.

To combat this growing need for additional physicians, the Physician Placement Service is attempting to offer selective locations, providing direct and accurate information relative to opportunities within the State. These activities and services cover, in brief, the following capacities:

- Maintenance of a list of physicians seeking locations and classification of these by specialist rating, by size of town and geographic location desired;

- Maintenance of a list of openings for physicians, with adequate data on each opening;

- Study and appraisals of need of the openings;

- Assistance to communities in developing ways and means of attracting qualified physicians;

- Methods of educating smaller communities to the necessity of investigating their needs and their ability to support a physician;

- Pointing out to these communities the steps they may take in securing a physician; and

- Suggesting how they may work toward keeping a doctor satisfied once he has been secured.

In keeping with these purposes and goals, the Physician Placement Service has established an effective information service that is available to any physician desiring location in the state. Pertinent data relating to medical facilities in the communities, to medical personnel already situated in a given place, and the medical needs as projected into the future program of that community can be obtained.

It is hoped that the facilities of the Physician Placement Service will be utilized more

by the young doctor just finishing his training for future progress toward attaining and will be of benefit to him in making the highest possible goals for himself and for his patients.

Diets And Wrestling

Increased emphasis on wrestling at the high school level adds to the role of the physician in helping coaches select boys for the proper weight classifications, supervise their diets and, above all, teach parents that athletic prowess is sustained by sound nutritional practices. Wrestling has increased in popularity in recent years. The sport requires little equipment, and one coach can supervise many participants. Body size—an important factor in other activities—excludes almost no one from wrestling. The principal danger arises when, at the insistence of an adult or of his own volition, a boy attempts to starve himself temporarily to reduce his weight and thus qualify for competition below his rightful classification. Beyond the ethical question involved, some may not be able to tolerate such practices. Drastic weight reducing measures have been found to result in jaundice, malfunction of the liver, acute pancreatitis. Young people who may be potential diabetics, such as those with a family history of diabetes, can develop clinical diabetes from starvation or crash diets. Other changes also can occur in starvation. Tissue proteins may be broken down to supply energy and, as this occurs, potassium is released. The increase in this electrolyte will cause premature beats and T-wave changes in the electrocardiogram, may even cause changes in the cardiac rhythm. Although these phenomena may disappear shortly after food is taken, the consequences may be severe in the athlete who has had rheumatic fever. (W. D. Paul, M. D.: "Crash diet and wrestling," *Journal of the Iowa Medical Society*, August 1966)

Alabama Infant Mortality

Barbara H. Holleman, R. N., B. S.

Harold Klingler, M. D., FACS, FICS, FACOG

Diplomate American Board of Obstetrics and Gynecology
Director, Bureau of Maternal and Child Health

Considerable concern has been expressed over the past several years concerning the problem of infant mortality in Alabama.¹ There has been little change in the infant mortality rate during the past ten years.² Previous to that time the reduction in mortality was quite rapid. In 1945 the mortality rate was 45. Ten years later it dropped to 32. However, from 1955 to 1964 the rate was reduced from 32 to 31. In other words, the mortality rate over the last ten years has been insignificantly reduced. (Figure 1) Provisional figures for 1965 indicate the rate for this year is slightly lower than for 1964.

It must be noted that the decline of infant mortality rates in the United States has been

slower and most likely is lagging behind the rates in other advanced countries.³

A further reduction of deaths among infants, as well as the prevention of mental retardation, is largely dependent upon the continuous efforts on the part of everyone concerned, including the medical profession, hospital administrators, public health authorities, nurses, and the general public. When total figures are broken down into white and non-white, it will be seen that the white rate of 23.2 is lower than the national average. However, the non-white rate is persistently higher. Upon further analysis of Figure 1, it is to be seen that the non-white mortality rate was actually higher in 1964 than it was in 1955. This situation allows for considerable speculation. It is frustrating to find that in one ethnic segment of our population the mortality is actually increasing.

The causes of most infant deaths in Alabama over the past ten years were: (1) Immaturity, (2) Respiratory Diseases, (3) Asphyxia and Atelectasis, and (4) Congenital Malformations.⁴

¹Communication with MCH Welfare Committee of State Medical Association of Alabama.

²All statistics were obtained through the cooperation of Mr. Ralph Roberts, Director of the Bureau of Vital Statistics.

³*Infant Mortality Trends 1930-64*, Public Health Service Publication No. 1000, Series 20—No. 1.

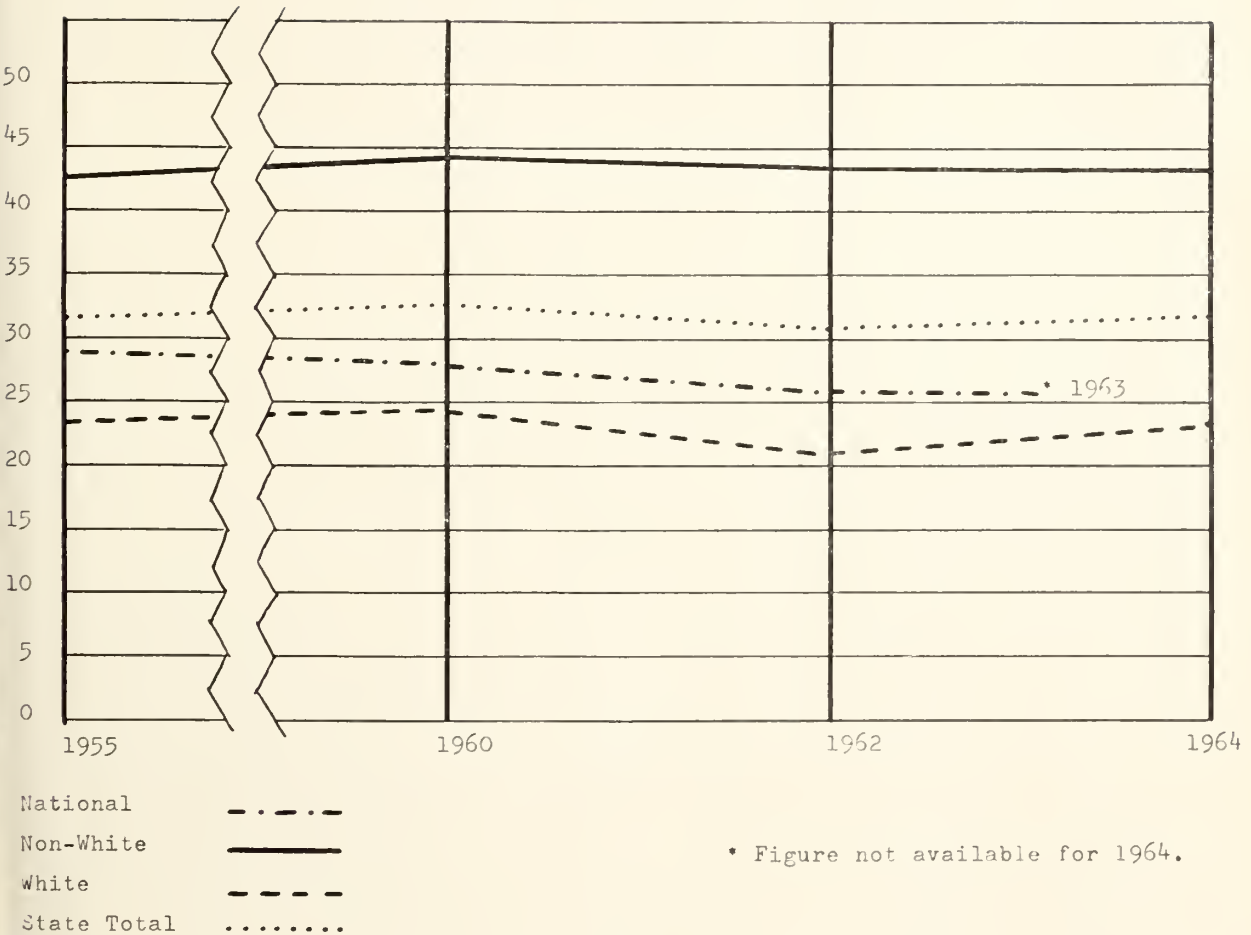
⁴Information obtained from Bureau of Vital Statistics, State Health Department of Alabama.

ALABAMA INFANT MORTALITY

Figure 1

INFANT MORTALITY RATES

National - State - State White and Non-White



It will be noted in Figure 2 that there is very little change in the causes of death over the past ten years. Deaths due to respiratory diseases were somewhat higher in 1964 than in 1955. Deaths due to asphyxia and atelectasis have been somewhat reduced. There has been very little change in the mortality rates due to congenital malformations. The mortality due to the preventable diseases including syphilis, diphtheria, pertussis, and tetanus is charted simply to indicate that there has been no change, appreciably, since 1955, and that the mortality in this group, however small, should be reduced to zero.

Figure 3 offers considerable information.

It may be seen that the rate for immaturity has diminished considerably since 1955. This has been the case in both white and non-white. On the other hand, it is to be noted that the rate for other respiratory diseases has increased in the non-white category. Congenital malformations, as a cause of death, has increased in the white race over the past ten years. The non-white has remained constant.

Figure 4 indicates the percentage of infant deaths in Alabama by age groups. During the first day of life the mortality rate for white infants has actually increased, whereas the non-white rate has decreased over the

ALABAMA INFANT MORTALITY

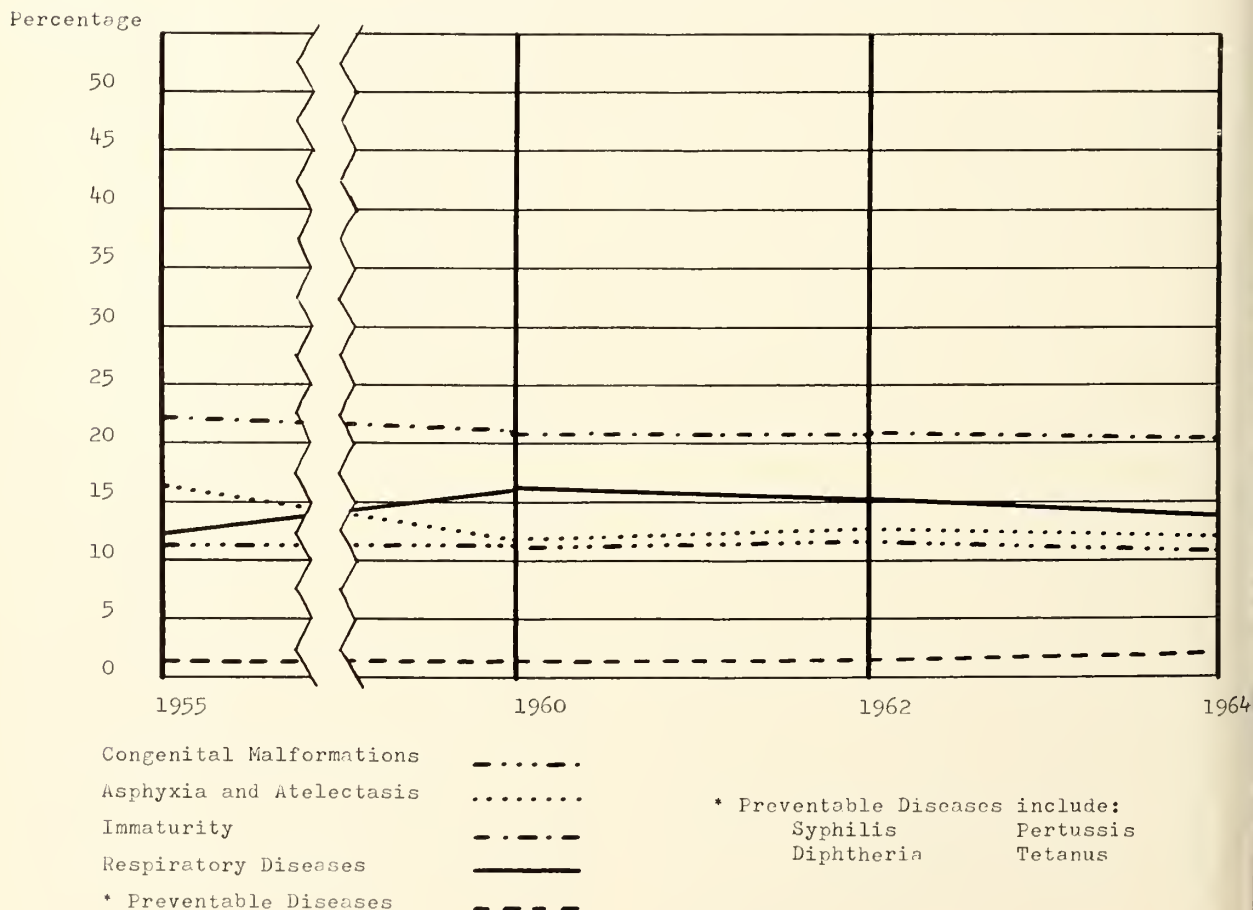
past ten years. This situation may be explained by improved delivery service offered non-white patients by Bureau of Maternal and Child Health of the State Health Department. The mortality incidence from one day to one week has remained constant. During the period of one week to one month the non-white death rate has decreased considerably, possibly explained by improved neonatal care through Bureau of Maternal and Child Health. However, it is interesting to note that the white rate has actually increased over the past ten years. During the period of one month to a year, the white rate has remained more or less constant. However, the non-white rate over the period of ten years has increased considerably.

In summary it may be said that there has been very little change in infant mortality over the past ten years in Alabama. Constructively, it is to be pointed out that (1) the encouragement of more research into the problems of infant mortality is necessary, (2) education of the public of the need for a continuation of adequate medical supervision of mothers before, during, after, and between pregnancies is necessary, (3) projects should be promoted to extend diagnostic services and routine care for all mothers and newborn infants, and especially intensive care for high risk groups, (4) techniques should be stimulated in all types of facilities, including those in the patient's own home.

September 1966

Figure 11

CAUSES OF INFANT DEATHS IN ALABAMA



ALABAMA INFANT MORTALITY

Figure II I

MAJOR CAUSES OF INFANT DEATHS IN ALABAMA - 1955 - 1964

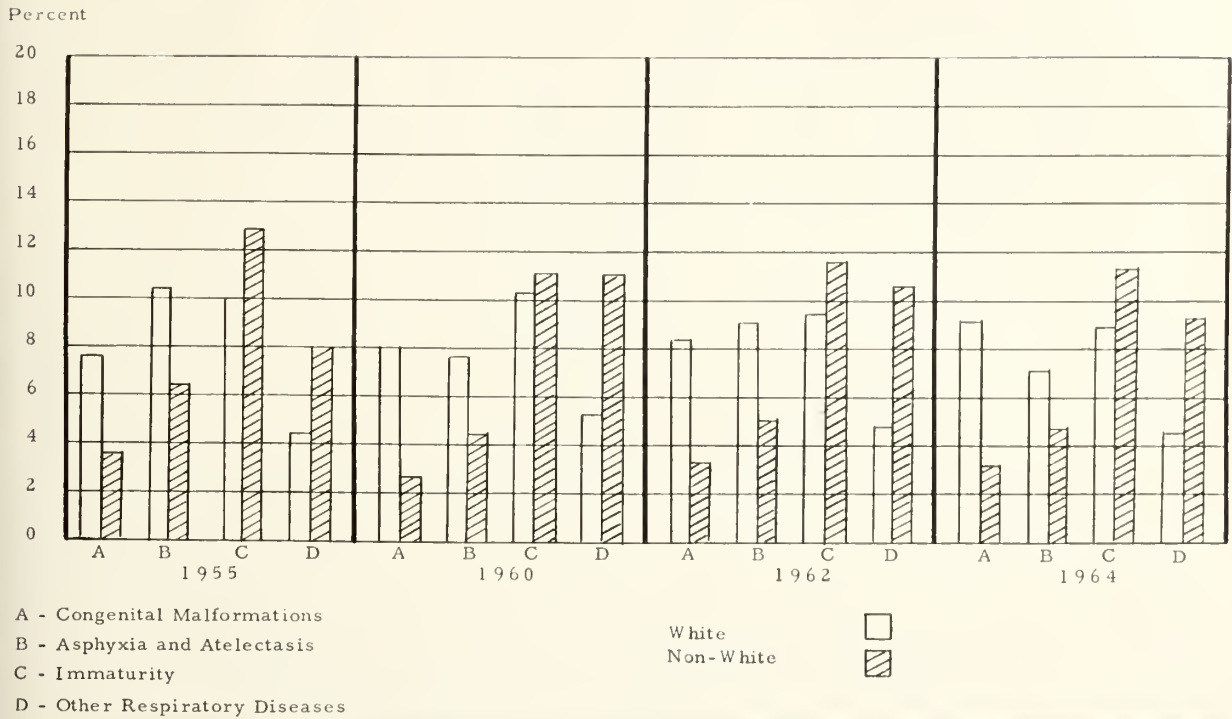
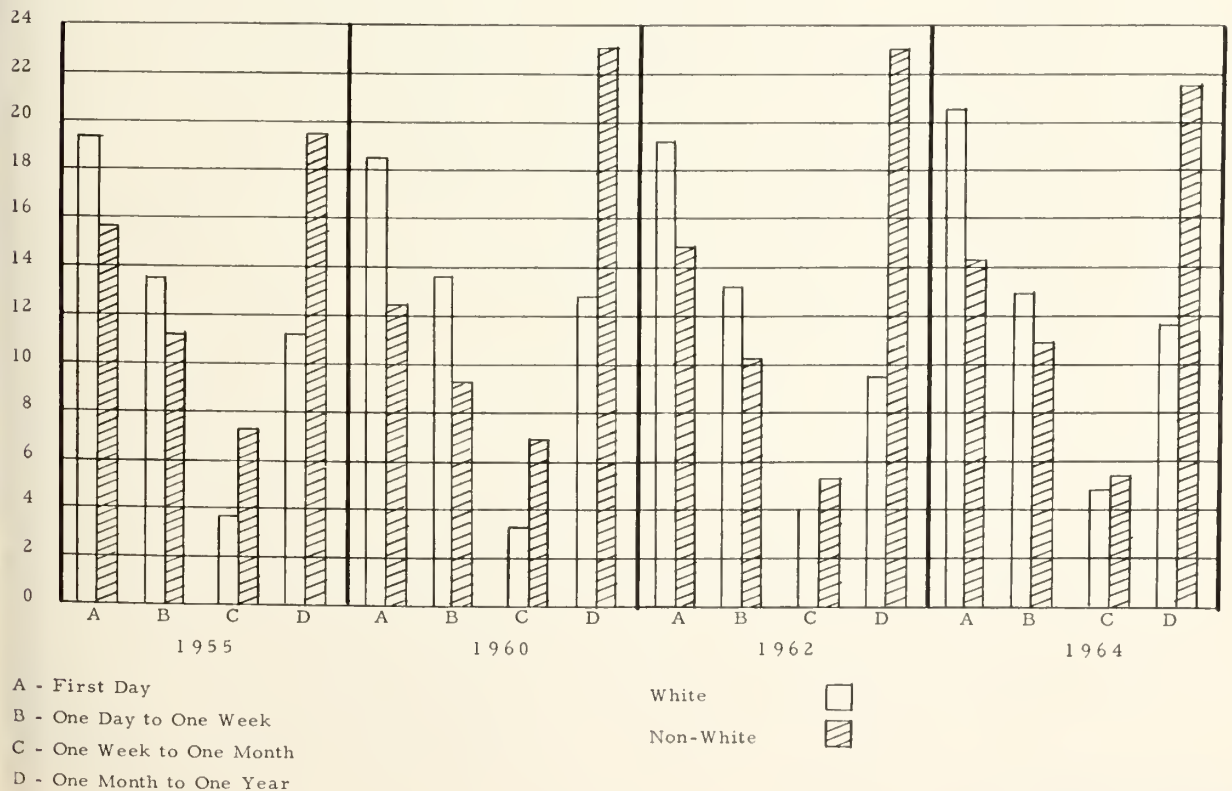


Figure I V

PERCENTAGE OF INFANT DEATHS IN ALABAMA BY AGE GROUPS





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*Brest, A. N., et al.: J. New Drugs 5:329, 1965.

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HY-4735

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Division of Geigy Chemical Corporation, Ardsley, New York

Geigy

Anti-Cancer Drug Tested On Hamsters

The action of an anti-cancer drug on tumors in hamsters has been found to be enhanced when the animal's body is cooled and the tumor kept at the normal temperature.

Dr. Vojin Popovic, professor of physiology, and Dr. Roberto Masironi, research associate in physiology, Emory University School of Medicine, reported this finding in a paper presented at the fall meeting of the American Physiological Society.

Dr. Popovic and Dr. Masironi's investigation is supported by research grants from the National Institute of General Medical Sciences. The scientists reported that the bodies of 75 hamsters were cooled to a temperature of 40° Fahrenheit while their tumors were kept uncooled at a temperature of 96° F. An anti-cancer drug, 5-fluorouracil, was given intravenously in a single injection in amounts of 22 milligrams per pound of body weight. One hour later the animals were rewarmed. All the animals survived the treatment, and, twenty days later, their tumors had disappeared. The tumors did not resume growth during the observation period which lasted 100 days from the time of injection.

When the same amount of drug was given tumor-bearing animals at normal body temperature or cooled animals with cooled tumors, the size of the tumor was not affected and the tumors continued to grow.

In experiments reported earlier, Drs. Popovic and Masironi showed that cooling the bodies of hamsters with tumors kept at normal temperatures caused tumors to disappear. In order to induce the tumors to disappear, however, the differential hypo-

thermia (cold body and warm tumor) had to last at least 10 hours. Although theoretically, these results suggested the possibility of similar treatment for human tumors, it was well known that such long-lasting cooling would not be tolerated by humans. In the same experiments the scientists found that the rate of volume blood flow to a warm tumor in a cooled animal is considerably higher than to a cooled tumor in a cooled animal. They also took into consideration the well-established fact the cells of normal body temperature have a higher metabolism than cooled ones. These various factors encouraged them to test whether anti-cancer drugs administered to cooled animals with warm tumors might become preferentially effective in tumor tissue without reaching toxic levels in the rest of the body.

The scientists view their findings as "promising" and suggest further experiments combining chemotherapy and differential hypothermia. The nontoxic single dose and the short cooling period involved in their recent experiments may point toward the possibility of application in humans. In addition, the single dose injection might help eliminate the adaptation of tumor cells which routinely occurs when an anti-cancer drug is repeatedly injected. When adaptation occurs, the drug is no longer effective against the cancer.

Drs. Popovic and Masironi emphasized, however, that additional studies in animals are needed before similar treatment is considered for cancer patients.

Their paper was entitled "Generalized Hypothermia Enhances Anti-cancer Drug Action on Normothermic Tumors."

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Ames Company, Inc., Elkhart, Indiana

AMES

Community Medical Television Network Established In Atlanta, Georgia

Atlanta, Ga.—The nation's first 2500 mega-Hertzian community television network devoted solely to medical instruction has received a Federal Communications Commission license to operate in Atlanta. The network will link Emory University School of Medicine, Emory University Hospital, Grady Memorial Hospital, the Veterans Administration Hospital, the Georgia Department of Public Health with its Georgia Mental Health Institute, and the U. S. Public Health Service Audiovisual Facility through the new 2500 mHz TV system set aside by the FCC for instructional purposes.

Receipt of the license and details of the network were announced Wednesday, November 9, 1966 by officials of the institutions involved. The Atlanta network, named the Community Tele-Med System, is expected to be a pattern for similar systems throughout the United States. It was initiated by the Public Health Service Audiovisual Facility, located at the Communicable Disease Center in Atlanta, in cooperation with Emory University and Grady Hospital. It will broadcast medical material through a system which allows two-way video and audio communication between Grady Hospital (Emory medical school's main teaching hospital), and the Audiovisual Facility. The VA Hospital, Emory Hospital, the downtown office of the Georgia Department of Public Health and the Mental Health Institute initially will receive video only, but are planning to install two-way audio communication as soon as possible. Many other hospitals in the Atlanta area are interested in the development and are expected to tie into the System.

Telecasts are expected to begin shortly after Jan. 1, 1967.

The 2500 mHz system was established by the FCC in 1963 for the transmission of educational and instructional TV programs from central locations to specific reception sites. Although other medical complexes are con-

nected via closed circuit cabling or by standard broadcast means, only one other, the University of California Medical Center at San Francisco, presently uses the 2500 mHz system. The Atlanta system, however, is the first to link together a variety of medical institutions from points of origin geographically separated from the points of reception. Eventually any properly equipped hospital or other site within a radius of about 25 miles and within visual sight of the original transmitter will be able to tie into the system. Initial cost of tying in would be about \$1,200 to \$2,000 for construction of a tower making sending points visible at the receiving point, plus the cost of cables and receivers.

Early programs scheduled include: Grand Rounds at Grady Hospital; Pediatric X-Ray Instruction; Psychiatric Conferences; Cardiology Tele-Lectures; X-Ray Technology Courses and specialized conferences in Neurology, Cancer, Obstetrics-Gynecology, and Surgery.

The Community Tele-Med System represents a cooperative effort at medical information exchange involving a private hospital and medical school, a state health department, a major city-county hospital complex, and facilities of the federal government. During the initial stages of the System's operation, the Audiovisual Facility will provide major staff support, engineering, consultation, production and programming direction, financial assistance, and equipment.

Following its initial stage, the Community Tele-Med System will be operated by a Council composed of representatives from Emory University School of Medicine, Emory Hospital, Grady Hospital, the VA Hospital, the Georgia Department of Public Health and the Mental Health Institute, Henrietta Egleston Hospital, and the Public Health Service Audiovisual Facility and other institutions which will join the System later. When the

(Continued on Page 837)

TELEVISION NETWORK

(Continued from Page 832)

Council assumes responsibility for the System, funding will come from sources other than the Audiovisual Facility.

Commenting on the System's significance, James Lieberman, D. V. M., Director of the Public Health Service Audiovisual Facility; Arthur P. Richardson, M. D., Dean of Emory University School of Medicine, and J. Willis Hurst, M. D., Chairman of the Department of Medicine, Emory University School of Medicine, said: "Medical Science is becoming increasingly fragmented. Improved methods of communication are the only solution for practical application of the knowledge we have. This System is one step in this vital effort."

Joseph A. Staton, Special Projects Officer, Audiovisual Facility, will serve as Director of the Community Tele-Med System and as Executive Secretary of the Council. Joseph P. Mingioli, Assistant Chief for Television

of the Facility's Motion Picture and Television Section, will coordinate production support and provide continuing liaison with the Facility.

Members of the Council are: Dr. Lieberman, Chairman; Dr. Richardson; Dr. Hurst; Burwell Humphrey, Administrator, Emory University Hospital; Dr. John Venable, Director, Georgia Department of Public Health; Thomas F. Gibson, Director, Health Education and Training Services, Georgia Department of Public Health; Dr. J. Frank Casey, Director, Georgia Mental Health Institute; John Pinkston, Jr., Superintendent, Grady Memorial Hospital; Dr. Bernard Hallman, Director of Professional Services, Grady Hospital; Gilbert McLemore, Administrator, Henrietta Eggleston Hospital; Dr. John G. Hood, Director, Veterans Administration Hospital; Dr. Julian A. Jarman, Chief of Staff, Veterans Administration Hospital; and Thomas W. Scott, Chief Medical Illustrator, Veterans Administration Hospital.

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FORTIFY NONFAT DRY MILK, AMA URGES

CHICAGO—Federal regulations should be modified to permit fortification of all nonfat dry milk with vitamins A and D, an American Medical Association council has urged.

Vitamin fortification would help prevent one of the possible paradoxes of food relief programs: that unless vitamins are also supplied, existing nutritional deficiencies can be made worse by supplementing vitamin-short diets with the protein, minerals, and calories in nonfat dry milk.

The AMA's Council on Foods and Nutrition has previously endorsed the fortification of nonfat dry milk. Its statement in the September 26 Journal of the AMA repeats this endorsement and encourages revision of the U. S. Public Health Service Milk Code to make fortification possible.

Some nonfat dry milk going overseas in the Food for Peace program already is fortified with vitamins A and D, the statement points out. This is made possible through a cooperative program between the Agency for International Development and the U. S. Department of Agriculture.

The Council urges that *all* nonfat dry milk be fortified and that the standards of identification for the substance, established by Congress in 1944, be changed to permit this.

"Nonfat dry milk is distributed widely as a surplus food commodity in domestic and foreign relief programs," the statement said. "It replaces fluid whole milk in the diet of entire families in the United States. Therefore, it is important that nonfat dry milk be

equivalent in fat-soluble vitamin content to whole fluid milk. This is not now the case."

It has become commercially feasible to fortify dry milk with vitamins without affecting its taste or stability, the statement noted.

"Serious nutritional problems exist in many areas of the world. Emergency food relief programs of many kinds have made significant inroads. However, the availability of surplus farm commodities cannot be considered justification for their inclusion in relief programs unless the foods meet the specific needs of the recipient population," the statement said.

"An existing nutritional deficiency can be made more grave by supplementing a diet with foods lacking the nutrient in short supply. Quiescent inadequacies can become full-blown deficiencies if additional protein, minerals, and calories are provided in the absence of adequate vitamin intake. This could be anticipated with both vitamins A and D . . .

"The Council on Foods and Nutrition strongly recommends that all nonfat dry milk be fortified with the vitamins A and D. However, the standards of identity for nonfat dry milk, established by Congress in 1944, do not allow for fortification with vitamins A and D.

Therefore, it is recommended that appropriate congressional action be taken to amend the Act of Congress of March 2, 1944, which established a standard of identity for nonfat dry milk solids, so that it will allow for the fortification of nonfat milk solids with vitamins A and D."

WHY THE RISE IN VENEREAL DISEASE?

Venereal disease is spreading so rapidly that it now represents this nation's most urgent communicable disease problem. Of particular concern to parents, physicians, and public health officials, the venereal diseases of syphilis and gonorrhea have become a health menace to our youth. More than half of such venereal infections are incurred by teenagers and young adults under age 25. (Department of Health Education: "Why the rise in teenage venereal disease?" American Medical Association) In its all-out educational campaign against venereal disease, the American Medical Association from its Chicago headquarters provides nationwide publicity and educational materials for use where they will do the most good. Also available, in addition to the above publication, are a pamphlet, "Venereal disease is still a world problem," (*Health Education Service for Schools and Colleges*, September 1964), and a poster, 18½ x 23 inches, "VD can be eliminated."

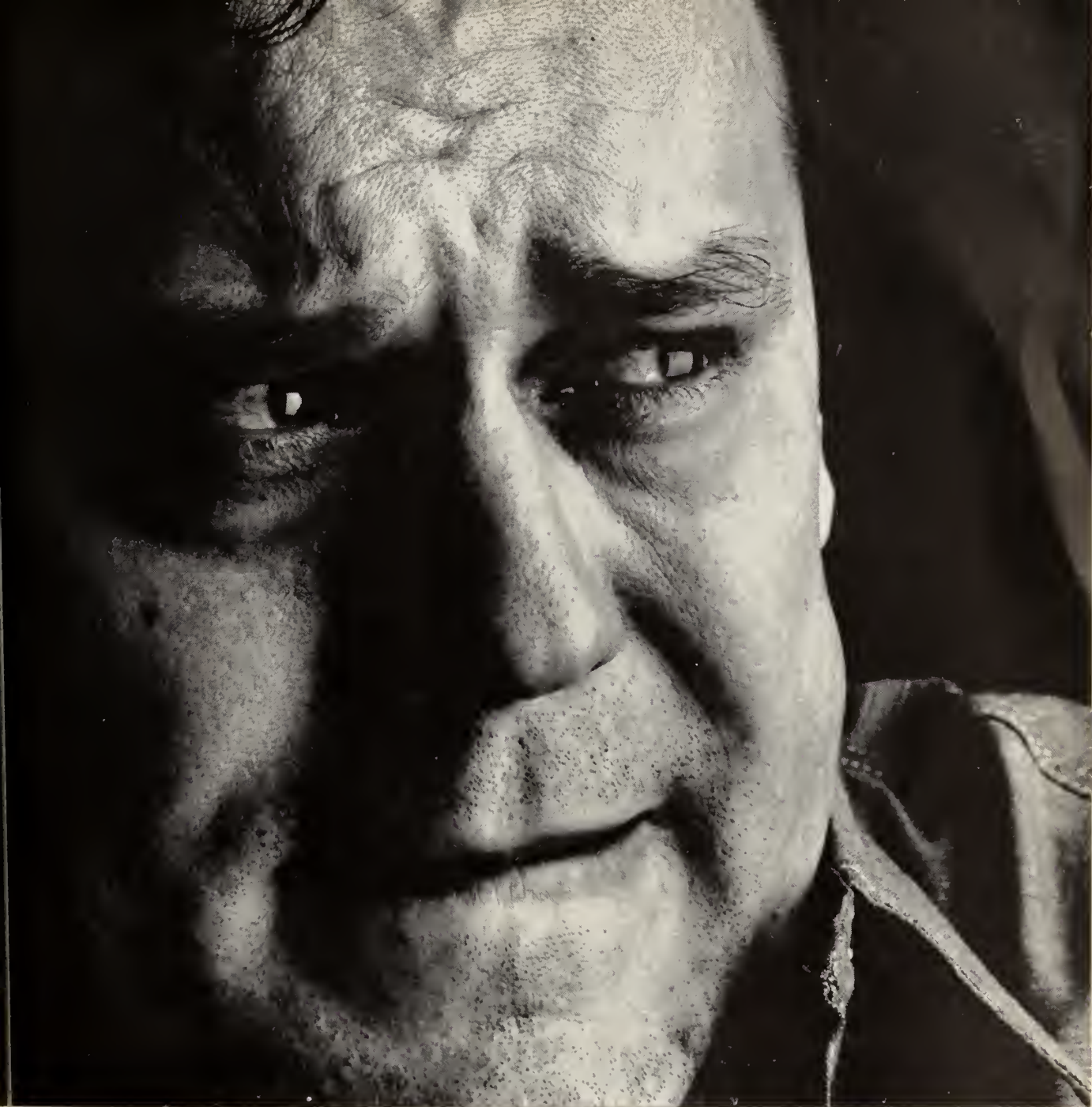


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Mike expects a penicillin injection. He's about to be pleasantly surprised.

His physician is going to prescribe an oral penicillin —PEN•VEE® K (potassium phenoxymethyl penicillin). It's usually so rapidly and completely absorbed that therapeutic serum levels are produced in 15 to 30 minutes. Higher serum levels generally last longer than with oral penicillin G.

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Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin-allergy may occur. Measures for treating anaphylaxis should be readily available; epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; anti-

histamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β -hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

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1967 Scientific Session
of the
American Cancer Society

May 3, 1967

Sheraton-Dallas Hotel
Dallas, Texas

Theme: *CURRENT CONCEPTS IN ETIOLOGY AND DIAGNOSIS OF CANCER*

Morning Session, 9:00-12:00 Noon

Viruses and Vaccination in Cancer

James T. Grace, Jr., M. D.
Assistant Director
Roswell Park Memorial Institute
Buffalo, New York

Carcinogenic Effects of Tobacco Usage

Oscar Auerbach, M. D.
Senior Medical Investigator
Veterans Administration Hospital
East Orange, New Jersey

Carcinogenic Effects of Solar Radiation and Prevention Measures

Robert G. Freeman, M. D.
Associate Professor of Dermatology
Baylor University College of Medicine
Houston, Texas

The Carcinogenic Hazards of Diagnostic and Therapeutic Radiation

Justin J. Stein, M. D.
Professor of Radiology and
Chief, Radiation Therapy Division
University of California Medical Center
Los Angeles, California

The Carcinogenic Hazards of Atomic Radiation

Elbert DeCoursey, M. D.
Director of Research
Trinity University
San Antonio, Texas

cal Professions and Students. No advance registration or registration fee.

Chemical Carcinogenesis

Paul Kotin, M. D.
Scientific Director for Etiology
National Cancer Institute
Bethesda, Maryland

Afternoon Session, 1:00-5:00 P. M.

What Constitutes an Adequate Periodic Health Examination?

Emerson Day, M. D.
Director
Strang Clinic
New York, New York

The Case For Periodic Cancer Detection Examinations

Victor A. Gilbertsen, M. D.
Assistant Professor of Surgery and
Director, Cancer Detection Center
University of Minnesota
Minneapolis, Minnesota

An Evaluation of the Annual Checkup

Thomas W. Clark, M. D.
Director
University of Pennsylvania Diagnostic
Clinic
Philadelphia, Pennsylvania

Proctoscopy for Cancer Detection in Asymptomatic Patients—What Age and How Often?

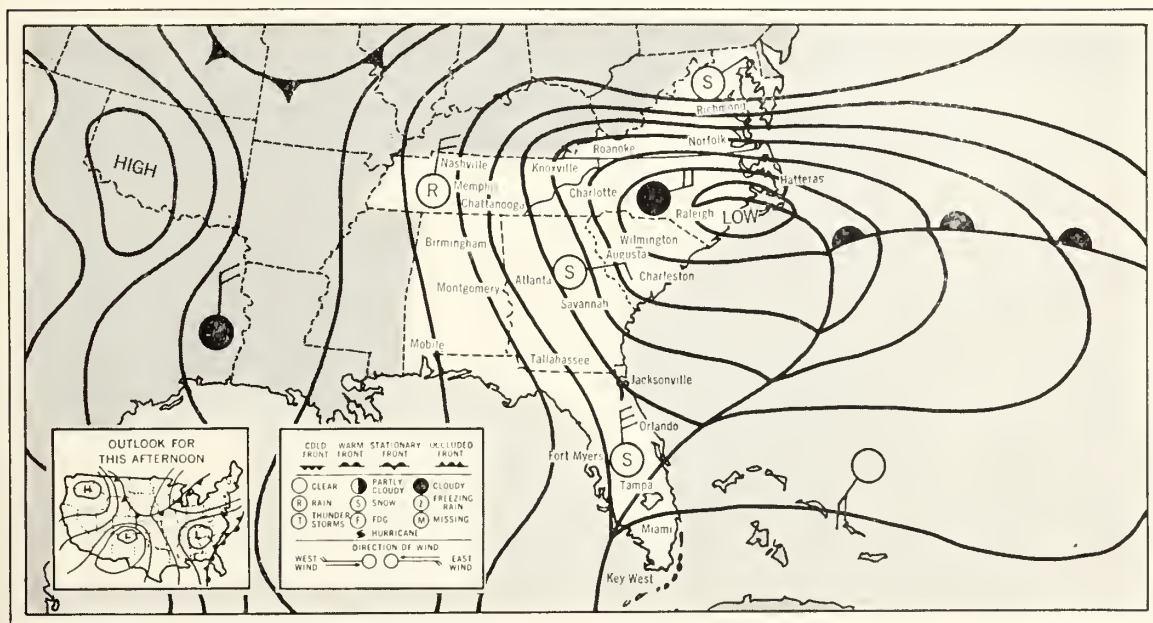
Robert J. Rowe, M. D.
Doctors Building
3707 Gaston Avenue
Dallas, Texas

Sessions are open to all members of the Medi-

(Continued on Page 842)

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"I don't understand the typography,
but it's a beautiful sentiment."

Reprinted from "The New Physician."

Crawford Williamson Long—

Discoverer of Surgical Anesthesia†

Emmett B. Carmichael*

The subject of this paper will be remembered as long as we have organized medicine for having the insight and courage to be the first to administer ether in a surgical operation.

Crawford Williamson Long was born on November 1, 1815 in Danielsville, Madison County, Georgia. His grandfather, Samuel Long, a Scotch-Irish Presbyterian, came to this country in 1762 and settled in Carlisle, Pennsylvania. He served in the army with George Washington and at the Yorktown surrender was a captain in the command of the Marquis de la Fayette. In 1787, Samuel, at the head of a group of settlers, moved south bringing his six year old son, James, with him. Due to a recent Creek Indian raid on a white settlement, the group stopped at Abbeville, South Carolina, raised a crop in 1788, and then in the fall moved to Madison County, Georgia.

This James Long was the father of Crawford Williamson Long. James Long was born in Carlisle, Pennsylvania in 1781. Young James Long was studious, fond of reading and received the best advantages the country then afforded. He inherited some money and negroes from his father, Samuel Long, and while yet a young man, by his industry and energy, had accumulated a sizable fortune. Progressive in every way, he owned the first store in Danielsville and was the first postmaster. He was clerk of the court for many years and founded the local academy. He endowed the school but the fund was lost during the Civil War. He established the first flour mill in that part of Georgia. He became a large stockholder in the Georgia



Crawford Williamson Long

Railroad Company and the stock later became quite valuable. For years he represented his county in the Legislature and his district in the state senate. He was a typical Scotch-Irish Presbyterian elder of the old school who held family prayers.

Crawford W. Long's mother, Elizabeth Ware, was born in Amherst, Virginia of English parents. Her father, Edward Ware, fought with the colonists in the Revolutionary War, entering the army at the age of 16. Some time after the war he emigrated to the south with his family and slaves and settled in Madison County, Georgia. Elizabeth was one of 14 children.

James Long married Miss Elizabeth Ware and their first child was Crawford W. Long. He was a normal boy, loving dogs and horses, swimming and athletic sports. He attended the local academy and at fourteen years of age entered Franklin College, now the University of Georgia. At that time Alexander H. Stephens was an upperclassman. Long

† Read at the Forty-Third Annual Meeting of the Alabama Academy of Science, Birmingham-Southern College, Birmingham, April 1, 1966.

* Assistant Dean, Medical College of Alabama and School of Dentistry, Birmingham, Alabama.

and Stephens became roommates in the first building which was erected at Athens and used as a dormitory for students. Stephens later became Vice President of the Southern Confederacy while Crawford was to become renowned due to his observations which led him to use ether as an anesthetic.

Young Crawford graduated in August, 1835, with a Master of Arts degree and second in his class. Crawford and Stephens remained friends through their lives and it is particularly interesting that the citizens of Georgia have selected them to represent the State of Georgia in Statuary Hall in the national capitol, Washington, D. C.

After graduation, Crawford's father suggested that he remain near Danielsville for a year before studying his chosen profession. The year was spent as principal of the local academy which his father had established. At the close of the school year he read medicine with Dr. George R. Grant of Jefferson, Georgia. The next year, 1836-37, was spent at Lexington, Kentucky, attending the medical department of Transylvania University. When in Lexington he frequently visited Ashland, the home of Henry Clay. Crawford's father was an ardent supporter of Mr. Clay. In 1837, Crawford entered the medical school of the University of Pennsylvania. His medical teachers were an illustrious group of physicians and surgeons: Phillip S. Physick, William Gibson, Nathaniel Chapman, George B. Wood, William F. Horner, H. L. Hodge and Robert Hare. The session began on the first Monday in November and ended in March. Every candidate for the M. D. degree had to be 21 years old and must have attended two complete courses of lectures. He was required to have attended one course of clinical instruction in the Philadelphia Hospital (Blockley). Each candidate was required to write a thesis on some medical subject and bad spelling or poor grammar would prevent a candidate from examination for the degree. The title of Crawford's thesis was, "Functional Amaurosis". Crawford received the M. D. degree in 1839. After an internship of

eighteen months in the hospitals in New York City, he returned to Jefferson, Georgia, and purchased the office of his preceptor, Dr. Grant, in August, 1840.

It seems that during the first half of the nineteenth century there was an odd group of individuals who traveled about the United States and England lecturing on chemistry. It was the custom to invite persons from the audience to inhale nitrous oxide (laughing gas, which was first prepared by Joseph Priestly in 1772) or ether for the purpose of provoking exhilaration and mirth provoking antics. The nitrous oxide "frolics" were known many years before young Dr. Crawford Long experimented with the gases. Nitrous oxide was used at first but ether soon became the favorite. After one of these lectures, the Georgia students at Pennsylvania locked themselves in a bedroom of their boarding house and tried the effects of ether. Then, during the month of November or December, 1841, Dr. Crawford W. Long introduced the use of ether as an exhilarant at parties in Jefferson, Georgia. It soon became fashionable to inhale ether at gatherings of young people and the custom spread to several neighboring counties in Georgia.

Dr. Long observed that after inhaling ether he subsequently discovered bruises or painful spots on his person which he had received while under the influence of the ether. He noticed that his friends who participated in the "ether frolics" received falls and blows which were sufficient to produce pain but they assured Dr. Long that they did not feel the least pain from their experiences. On observing these facts, Dr. Long was led to believe that an anesthetic condition of the body was produced by the inhalation of the ether and that the use of ether in surgical operations would prevent pain. It was his keen insight and knowledge that led him to use ether in surgery.

The first person to whom Dr. Long administered ether in a surgical operation was Mr. James M. Venable who lived about two miles from Jefferson. Mr. Venable had consulted

Dr. Long on several occasions in regard to the wisdom of removing two small tumors from the back of his neck. He postponed the operation from time to time from the dread of pain. Finally, Dr. Long explained his observations of the individuals who had participated in the "ether frolics" and who had experienced no pain although they had received severe bruises while under the influence of the ether. Then Dr. Long suggested the probability that the operation might be performed without pain and proposed that he operate upon him while under the influence of the ether. Mr. Venable consented and the operation was performed that same day, March 30, 1842. Dr. Long administered the ether on a towel and with the other hand he felt his pulse. When Venable became insensible to the prick of a pin, Dr. Long operated. When informed that the operation was over, Mr. Venable was skeptical until the tumor was shown him then he assured Dr. Long that he did not experience the slightest degree of pain during the operation.

As an inducement to Mr. Venable to allow himself to be the first subject of such an experiment, the fee was set at \$2 for the surgery and 25 cents for the ether. There were four witnesses to the operation. The second tumor on Mr. Venable's neck was excised on June 13, 1842. Dr. Long's colleagues considered him to be reckless and even suggested that he might be mad. Stories were circulated that he could put people to sleep and carve them to pieces without their knowledge.

At that time, Mesmerism was not only attracting the attention of the laymen but also the scientific men of the day. Lecturers on mesmerism were touring the South and people in the small towns were investigating its possibilities. Some of the local citizens of Jefferson felt that Dr. Long had used mesmeric powers on Mr. Venable to produce insensibility to pain and that it was not due to the inhalation of ether. Many doctors in both England and France had accepted and adopted mesmerism as the long hoped for

panacea whereby suffering humanity would go through surgery without pain. Anton Mesmer, a Viennese physican, had been successful in influencing a good number of doctors and surgeons to use hypnotism in their practice.

When Dr. Long told people about his surgical experiences with ether anesthesia, they were skeptical. Although it was common knowledge that nitrous oxide produced exhilaration and sleep, they still did not believe him. Nitrous oxide had been prepared by Joseph Priestly in 1772. In 1800, Sir Humphrey Davy determined its composition and was the first to point out the property which the gas possesses of rendering one temporarily unconscious when it is inhaled. However, Davy's suggestion that the nitrous oxide produced sleep had been forgotten. No doubt, this was due in part to the fact that authors of articles cautioned against its employment since sleep and death might result.

The question has been asked by many individuals as to why Dr. Long did not publish the results of his surgery on Mr. Venable. Dr. Long knew that the use of ether in surgery could be dangerous in inexperienced hands. He knew that the method of administration needed to be refined. He also knew that the local citizens were in favor of mesmerism since no drugs were involved. The local physicians who knew of Long's success with the surgical operation were not willing to publicly support him. The physicians and surgeons actually attempted to discourage Dr. Long from using ether on the assumption that he might kill the patient. Even his close friends pleaded with him to abandon the use of ether in surgery since a fatality would result in his being mobbed or lynched. Actually, Dr. Long knew of but one person who encouraged him and who had faith in his discovery. It was Miss Caroline Swain, a young lady of 16 to whom he was engaged and who eventually became his wife. His refusal to publish the results of the

(Continued on Page 848)

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(Continued from Page 845)

operation might be likened to the refusals of both Jenner and Ehrlich to publish results of their classical discoveries until they had observed many thousands of experiments.

In December, 1844, Dr. Long advised Dr. Joseph B. Carlton to use ether in his practice. Dr. Carlton, while visiting his wife's family, extracted a tooth from a boy while under the influence of ether and without pain.

The term, anesthetic, was first suggested by Dr. Oliver Wendell Holmes in a letter to Dr. W. T. G. Morton which was dated November 21, 1846. He also suggested that the state be called anesthesia.

In 1848, Dr. Paul F. Eve, Professor of Surgery at the Georgia Medical College, Augusta, invited Dr. Long to visit the institution and address the medical students. Dr. Long was introduced as the originator of practical anesthesia.

In 1849, Dr. Long published an account of his discovery of ether as an anesthetic for surgical operations. The article appeared in Dr. Eve's Southern Medical and Surgical Journal.

Dr. Long began to use ether with his obstetrical patients a few years after the operation on Mr. Venable. He administered it to his wife at the birth of one of her children about 1847 and continued to use it in obstetrics. In fact, while attending a delivery of the wife of a local congressman, Dr. Long suggested that they use ether but the delivery occurred without complications. Soon after the delivery he fell unconscious upon the patient's bed and died soon after. Although Dr. Long was what might be called a general surgeon, it seems that he specialized somewhat in obstetrics. When he had entire charge in preparing the prospective mother for delivery, he lost but two cases in nearly forty years of practice, a phenomenal record when we consider that his practice ended

just before Lord Lister introduced aseptic surgery.

On August 11, 1842, Dr. Crawford Williamson Long married Mary Caroline Swain, the 16 year old daughter of George Swain, a local planter. She was the niece of Governor Swain of North Carolina, afterward president of the University of North Carolina. Mrs. Long was a lovely, intellectual woman and a gracious hostess. The Long's home soon became a favorite social center for the young people of the Jefferson community. They built a new home in Atlanta and moved there in 1850 but after a year moved to Athens where there were better educational advantages for their children.

In the meantime, Dr. Long's brother, H. R. J. Long, had received the M. D. degree. They became partners and soon opened a drugstore. One of the first advertisements of the Long Drugstore appeared in the November 13, 1851 issue of the Southern Banner. The advertisement covered a broad range of items such as toilet and shaving soaps; cosmetics, pomades, hairgloss, beef marrow, bear's oil, rose oil, depilatory powder, perfumes for the handkerchief consisting of extracts of verbena, jessamine, lily of the valley, Jenny Lind, etc., toothpaste, toothpowder, assortment of superior shaving, tooth, hair and flesh brushes, medicines, drugs, paints, oils and glass. The business prospered and expanded to become the largest wholesale drug and retail business in northeast Georgia. A large garden for medicinal plants was maintained about a hundred yards from Dr. Long's home.

The people of the Southern Confederacy and the Confederate Army were in dire need of drugs soon after the conflict began. Local physicians and pharmacists prepared a list of drugs which were to be extracted from native plants. The Long Drugstore sent its pharmacists over northeast Georgia to collect crude drugs and processed them for local consumption. The Long Drugstore did supply the local community, as well as a large area of northeastern Georgia. It is just possible

that some of these drugs which they prepared found their way into army hospitals of the Confederacy. When the war began, the Long Drugstore had a large shipment of drugs en route by boat. The Confederate States government seized the whole lot at Savannah. At least the Long Drugstore's order of drugs helped to relieve the shortage of drugs at the beginning of the war. Actually, the drugstore had on hand a good stock of ether, chloroform, carbolic acid and iodine. The iodine was especially useful in treating gunshot wounds. It came back into use again during World War I.

Records of the transaction of the Long drugstore were not kept but some procurement records were preserved. For example, the Long drugstore sold the following items to the Confederate States¹:

July 2, 1862—

40 pounds of lead pipe	\$10.00 ²
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December 14, 1863—

Horse medicine	6.00 ³
Soap	2.00

¹Record Group No. 109. The National Archives and Records Service, Washington, D. C.

²Confederate States of America. Purchase Order. To: C. W. and H. R. I. Long Drug Store, Athens, Ga. for William J. Pryor, Agent for Captain M. H. Wright, Ordnance Office, C. S. Army.

³Confederate States of America. Purchase Order. To: C. W. and H. R. I. Long Drug Store, Athens, Ga. Signed: Major J. Livingston, Quartermaster, C. S. Army.

⁴Document No. 305. Confederate States of America. Mail Contract for Route No. 6236. Signed: John H. Reagan, Postmaster-General, C. S. A. C. W. Long, Surety, Athens, Ga. Thomas Crawford, Postmaster, Athens, Ga.

⁵Document No. 523. Confederate States of America. Mail Contract for Route No. 1772. Signed: John H. Reagan, Postmaster-General, C. S. A. Crawford W. Long, Surety, Athens, Ga. J. C. Orr, Postmaster, Athens, Ga.

⁶Document No. 560. Mail Messenger Service—Confederate States of America in Athens, Ga. Route No. 1816. Signed: John H. Reagan, Postmaster-General, C. S. A. C. W. Long, Surety, Athens, Ga. J. C. Orr, Postmaster, Athens, Ga.

Records were also preserved which show that Crawford W. Long signed contracts with the Confederate States of America as one of the sureties concerning the transport of mail in Athens and to and from Jefferson, Georgia, as well as neighboring towns:

June 1, 1861-June 30, 1863—

\$1,200.00 per annum⁴

May 1, 1863 - June 30, 1867—

\$ 375.00 per annum⁵

May 15, 1864 - May 14, 1865—

\$ 490.00 per annum⁶

All of the contracts were signed by John H. Reagan, Postmaster General, Confederate States of America. The above points up the fact that Dr. Long was one of the substantial citizens of Athens and that many records have been preserved. However, the author has been unable to locate records of the sale of native drugs to the Confederate States Army but still hopes to find such.

Dr. Crawford W. Long was appointed by the Confederate States Government as physician at Athens, Georgia for the families of soldiers absent from home fighting for the Confederate cause and was relieved from active service for this and to act as surgeon for sick and wounded soldiers at the University Campus Hospital. Again, it seems that the Long Drugstore probably did supply drugs to the wounded soldiers but records have not been located.

In 1865, Athens became a Federal garrison. Since Long's Drugstore was the largest in the area, again we ask the question as to whether he furnished drugs to soldiers but in this case, to the Federal soldiers. In 1867, Dr. Long was offered the position of surgeon of the post by Brevet Col. C. F. Trowbridge and it was approved on April 25, 1867 by Surgeon General J. S. Billings. The position was filled by him until civil government was enforced.

In 1839, Pereira, in his "Elements of Materia Medica", states that ether vapor would relieve the effects caused by the accidental

inhalation of chlorine gas. He also states that he had given nitrous oxide to about 100 persons.

In February, 1842, Dr. Charles T. Jackson, an Analytical Chemist of Boston, stated that he had inhaled ether after accidentally inhaling chlorine and observed that he was free from pain. It seems that Dr. Jackson was a frequent visitor to Georgia since he was involved as a chemist in the Dahlonga gold mines of Georgia. When he learned about the above properties of ether is not known but since he was a chemist, he should have known about Dr. Davy's observation of the properties of nitrous oxide. He actually could have heard about Long's operation on Mr. Venable since it was a common topic of conversation in that section of Georgia.

Dr. Jackson's office was near that of Dr. W. T. G. Morton, a dentist, who requested Dr. Jackson to give him something to allay the pain of a nervous patient. So, on September 30, 1846, Dr. Jackson gave Dr. Morton some ether with some essential oil added to disguise the odor of the ether. Dr. Morton did administer ether to himself and to one or two patients. He also got permission from Dr. John C. Warren, the surgeon at the Massachusetts General Hospital, to administer his nostrum to a patient on October 16, 1846. On December 12, 1846, Dr. Morton secured an English patent, through an English subject, for the anesthetic under the name "Letheon."

Dr. Horace Wells had used nitrous oxide as an anesthetic for his patients as early as 1844. He also became interested in the use of ether as an anesthetic.

In any case, their experiments with ether were anticipated by Dr. Long by at least two to four years.

In 1849, Dr. Morton applied to Congress for a reward of \$100,000 for the use of ether as an anesthetic. His claim was opposed by Dr. Jackson. Dr. Jackson held that he had prior right to exploit the use of ether since he had suggested its use to Dr. Morton. Actually, it was Dr. Jackson's letter to Senator

Dawson stating that Dr. Long had a prior claim on the discovery of ether which killed the bill that was before Congress.

In 1854, Dr. Jackson visited Dr. Long and compared proofs of his experiments and suggested that Dr. Long join him in his claim for priority. It seems that Dr. Jackson wanted Dr. Long to agree that he had discovered ether and that Dr. Long would be given credit for the first practical use of ether in surgery. Dr. Long refused to agree to such a scheme.

Dr. Jackson had failed previously in his efforts to seize as his own the discoveries and inventions of others. In 1832, Dr. Jackson and Samuel F. B. Morse, while returning from Europe on the S. S. Sully, discussed the newly discovered electro-magnet. Dr. Jackson explained that it was known that the passage of an electric current was instantaneous. Morse did perfect the telegraph and applied for a patent. Because of their conversation on the Sully, Jackson attempted to prove that he was the inventor. The U. S. Supreme Court declared Morse the sole inventor of the telegraph.

Dr. Jackson attempted to appropriate Alexis St. Martin from Dr. William Beaumont for the purpose of experimenting on digestion in 1834. Dr. Beaumont began his series of experiments on gastric digestion in 1825 and had published part of the results in 1828.

Another unsavory act of Dr. Jackson was his attempt to take credit from C. F. Schonbein of Germany for the discovery of gun cotton in 1845.

Since Dr. Jackson had made three previous rather unsavory attempts to secure for himself possible fame and wealth from the works of others, it seems quite possible that he had knowledge of Long's use of ether when he advised Dr. Morton to use it on his patient in 1846.

Dr. Horace Wells opposed Dr. Morton's patents, went insane and committed suicide in 1848.

Dr. Morton, on learning of attempts to deprive him of the glory of discovery of ether as an anesthetic, died of apoplexy in 1868. A white marble monument was placed at Morton's grave with the following inscription: "William T. G. Morton, inventor and revealer of anesthetic inhalation. By whom pain in surgery was averted and annulled. Before whom in all time, surgery was agony. Since whom, Science has control of pain."

When Dr. Jackson saw the inscription on the monument, he flew into a rage and was taken to McLean Hospital where he remained hopelessly insane until his death about seven years later on August 28, 1880.

The controversy over who was the discoverer of ether anesthesia continued for many years. In 1852, the French Academy of Sciences granted a prize to Dr. Jackson as the discoverer of ether and a like amount to Dr. Morton as the first to apply it. In 1877, Dr. J. Marion Sims published an article in the "Virginia Medical Monthly" claiming that Dr. Long had made the discovery. That seemed to be the turning point in the controversy and since then Dr. Long has been recognized in his discovery by many memorials:

(a) In 1912, the University of Pennsylvania unveiled a large medallion to the memory of Crawford W. Long.

(b) A statue of Dr. Long is in the National Hall of Fame (Statuary Hall) Washington, D. C.

(c) A bust of Dr. Long is in the state capitol Hall of Fame, Atlanta.

(d) A monument to Dr. Long was unveiled in his native Danielsville in 1936.

(e) There is a monument to Dr. Long in the public square at Jefferson, Ga.

(f) A bronze bust of Long is in the University of Edinburgh, Scotland.

(g) A relief of Long is on the facade of the State Office Building, Atlanta.

(h) A bronze plaque of Dr. Long was hung

in the auditorium of the John B. Murphy Memorial, Chicago.

(i) The Crawford W. Long Memorial Hospital of Emory University, Atlanta.

(j) On September 15, 1957, the Long Memorial Museum was dedicated at Jefferson, Ga.

(k) An oil painting of Long was hung in the Alumni Hall, University of Georgia in 1926.

(l) The first Doctor's Day was celebrated on March 30, 1933, ninety one years after Dr. Long performed his famous operations by the Auxiliary to the Barrow County Medical Society of Georgia. Several states have chosen March 30th as Doctor's Day. The Congress of the United States passed a resolution commemorating Doctor's Day on March 30, 1958.

(m) In 1940, the Famous American Series of stamps was issued. Dr. Crawford W. Long's portrait appeared on the two-cent red stamp on April 8th.

Long has been described as a large, amiable man with rather small hands for his size. He was an avid sportsman: fishing, horses and hunting being his favorites. Cards, dancing and the theater filled many of his evenings. As a physician, he was hard working, progressive and skillful. He was one of the first to use quinine for bilious fever of the South which he recognized as malaria and was an early advocate of rest in the treatment of tuberculosis. As a surgeon, he performed numerous radical breast amputations, including axillary node dissections.

Dr. and Mrs. Long had 12 children. Their first child was born in 1843. Because it was such a terrible ordeal, Mrs. Long explained to her daughter, Mrs. Frances Long Taylor, that Dr. Long administered ether to her so that childbearing lost much of its terrors. Although records were not kept of the use of ether in the delivery of his own children, he did preserve the records of using ether in seven other obstetrical cases. In one case in 1872, Mrs. Fannie Hudgins, he delivered twins while she was thoroughly anesthetized.

Of the 12 children, four daughters and one son lived to maturity. Seven of the children died in infancy. Mrs. Long died in 1884 as a result of a train wreck.

On June 16, 1878, Dr. Long suffered a cerebral hemorrhage while attending the delivery of the wife of Congressman H. A. Carlton. His last words were, "Care for the mother and child first." With his passing, many of his memoranda, records and his innermost thoughts were never published and thus most were lost to mankind. Dr. Long sought no profit for his discovery but only the recognition that he had been the first to use ether for surgical anesthesia.

On his tombstone is carved his credo, "My Profession is to me a Ministry from God."

The members of the Crawford W. Long family were buried in the Oconee Cemetery, Athens, Georgia.

* * *

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(Continued on Page 857)

DORSEY

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Season

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this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts

"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.¹

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.²

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.³ The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.⁴ The cilia then sweep the particu-



late matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.⁵

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.⁶ The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.⁷ The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.⁸

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.⁹ In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.¹⁰ The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.¹¹ The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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precipitate an attack of rhinorrhea in hay fever sufferers.¹² Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.



The complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.¹³ This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

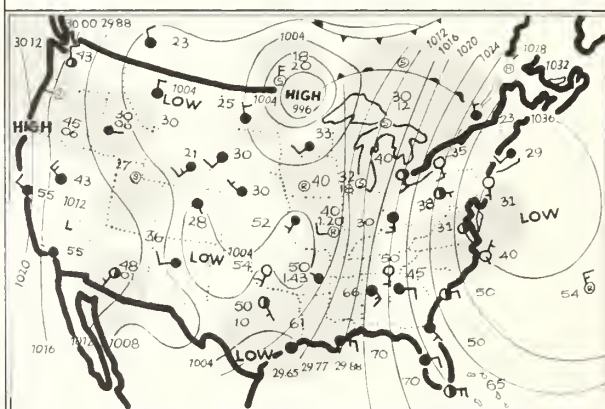
Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections, antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases,

symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

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(Continued from Page 852)

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Announcement

A continuation course in "Clinical Electroencephalography" will be conducted on June 5-7, 1967 in Philadelphia, Pennsylvania. This is the second course sponsored by the American EEG Society (aided by a grant from the Bureau of State Services, U. S. P. H. S.) and is designed for physicians who have had little or no formal EEG training. Inquiries about further details of the course and registration procedure should be addressed to Dr. Donald W. Klass, EEG Course Director, Mayo Clinic, Rochester, Minnesota.



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Plans For A Regional Medical Program For The State Of Alabama

The State of Alabama is anticipating designation as the site of one of the Nation's Regional Medical Programs, and approval of a grant from the Federal Government would initiate a major planning program for the State's efforts to combat heart disease, cancer and stroke.

This program will be focused primarily upon the continuing education of physicians, dentists, nurses, medical technologists and other paramedical personnel throughout the Alabama region. Involved will be the coordination of the region's educational facilities and resources, particularly the Medical Center of the University of Alabama in Birmingham, with the professional groups, volunteer health agencies, concerned laymen, hospitals, and other health related institutions.

This region is one of relatively large area, has a large rural in addition to urban population, a relatively low per capita income and a low physician to population ratio. These various geographical, sociological and economic factors are intimately related to the problems of providing high quality medical care for all segments of the population. The medical profession in Alabama, and the University Medical Center are mutually concerned with improving the quality and availability of medical care in this region, and consider the planning portion of the Regional Medical Program as a unique opportunity to better define the medical needs of this region and to develop plans for meeting these needs, with respect to heart disease, cancer and stroke. This is being undertaken in a setting where there is close co-operation between the medical profession and the University Medical Center. There is also a considerable background of experience in medical school participation in educational and training programs at other hospitals within the State, as

well as in continuing education programs currently being offered and anticipated for the future.

Regional Advisory Committee

A Regional Advisory Committee of 24 members has been formed with representatives of the Medical Association of the State of Alabama, University of Alabama Medical Center, Alabama Hospital Association, Alabama State Medical Association, the State Board of Health of Alabama, certain voluntary health organizations, State of Alabama Dental Association and other health professions, including the Alabama Nursing Association. The committee also includes lay representation from the various geographical regions of this State, and a number of different hospitals and institutions.

Members of the Advisory Committee are:

Dr. T. Joseph Reeves, Chairman, Medical Center of the University of Alabama in Birmingham, Alabama.

Dr. William J. Atkinson, Mobile General Hospital.

Mr. Winton M. Blount, Montgomery.

Dr. John M. Chenault, Board of Censors, MASA.

Mr. James H. Crow, Jr., Decatur.

Dr. Charles Crump, Alabama Heart Association.

Dr. Harold Dodge, Medical Center.

Dr. James O. Finney, Medical Association of the State of Alabama.

Dr. Walter B. Frommeyer, Medical Center.

Dr. James G. Galbraith, Medical Center.

Dr. Julian Giles, Tuskegee Veterans Administration Hospital.

Dr. Herschell Hamilton, Alabama State Medical Association.

REGIONAL MEDICAL PROGRAM

Dr. S. Richardson Hill, Jr., Dean, Medical College of Alabama.

Mr. Earl M. McGowin, Chapman, Alabama.

Mr. Matthew F. McNulty, Alabama Hospital Association.

Dr. William A. Maddox, Medical Center.

Dr. E. N. Moore, Jr., American Cancer Society, Alabama Division, Inc.

Dr. Robert Parker, Board of Censors, MASA.

Dr. John Day Peake, Mobile Infirmary.

Dr. Lucius H. Pitts, Miles College.

Mr. Michael Pizitz, Alabama Heart Association.

Dr. Howard S. J. Walker, Jr., Mobile General Hospital.

Mr. Owen F. Wise, Rehabilitation and Crippled Children Service, State Department of Education.

Ex-officio members will always include the following:

President of the Medical Association of the State of Alabama.

President of the Nursing Association of the State of Alabama.

President of the Dental Association of the State of Alabama.

Chairman of the Board of Censors, State of Alabama.

It will be necessary to determine during the period of planning, the requirements of co-operating hospitals in terms of personnel and equipment to undertake programs for training. Also, the level of support, facilities, equipment and personnel that will be required at the University of Alabama Medical Center to enter into a co-operative program with hospitals throughout the region must be determined.

The Region will consist of the State of Alabama, but should it later become clear that portions of other adjacent states desire to be incorporated in the region, and there is

(Continued next Page)

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assurance that this could be done with harmony, the definition of the region could be extended.

It will be necessary to determine how many county medical societies, county dental societies, and hospitals in those areas already tentatively designated as intermediate teaching hospitals in Alabama would desire the development of an intermediate center in their particular areas. The State Board of Health investigated this problem and has made a tentative designation of several cities as desirable locations for intermediate training programs. These cities, selected on the basis of existing hospital facilities and geographical location, are Decatur, Gadsden, Tuscaloosa, Mobile and Dothan. Again, this selection is tentative, and perhaps changes will be made. The attitude of the medical and dental professions and of the hospitals will be all important.

Another part of the feasibility study would be the identification of physicians and scientists already living in the intermediate centers, or close to them, who are qualified and willing to undertake the responsibility for participation in the program at the intermediate centers. Other hospitals in the state have shown interest in participation, and there will be many more.

The two Veterans Administration Hospitals within this region have active teaching and training programs and have expressed a desire to participate in this Regional Medical Program. One is the Birmingham Veterans Administration Hospital which is a Dean's Committee Hospital of 600 beds. This hospital is completely integrated with the activities of the University Medical Center with respect to patient care activities, education at the undergraduate, graduate and postgraduate levels, and with respect to research and research training.

The Tuskegee Veterans Administration Hospital and Tuskegee Institute have established teaching programs and University Medical Center affiliations. The Tuskegee

VA Hospital has 1661 beds. In addition, there are at Tuskegee clinical facilities at the John A. Andrews Hospital and outstanding facilities for conducting research on large animals. In fact the latter is one of only two such centers for large animal research in the United States. It can complement and supplement the activities of the intermediate hospitals.

These relationships between the University Medical Center, the intermediate hospital and the smaller hospitals throughout the State in matters pertaining to continuing education, further development of facilities, and to patient care, will be developed during the period of planning.

The availability of medical care for the various areas of the region, for the various socio-economic groups within the region, and the existing pattern of referral of patients with special cardiovascular problems in various regions of the State will be determined. Furthermore the incidence and prevalence of heart disease, cancer, and stroke in the various regions of the State will be determined.

This information will be of importance in establishing the appropriateness of location of the intermediate and referral hospitals, and also the type of support that will be required to meet the objectives of this program in providing high quality medical care for all segments of the population.

A Program for Continuing Education

There will be an evaluation of the existing programs of continuing education with respect to the levels of attendance, the locations of the attending physicians and sites of the program. Such an evaluation will be important in determining how effectively the overall needs for continuing education are being met in this region. In addition, there will be a similar evaluation of continuing education programs that have been conducted for nurses, medical technicians and other medical personnel.

During the period of planning a program will be developed for improving and expand-

ing continuing education in this region. At present, a few hospitals have appointed medical directors and are developing their individual continuing education programs. It is anticipated that as the program develops, a number of additional hospitals with the financial support available through the regional medical programs will want to plan for appointment of fulltime medical directors who will develop local continuing educational programs. The Medical Center of the University of Alabama in Birmingham will plan for an expanded program in continuing education. It seems likely that it will be desirable to provide opportunities for relatively short periods of intensive training for medical directors of the intermediate hospitals throughout the state, and for physicians in practice who desire to come to the Medical Center to gain first hand experience in new techniques, methodology and new forms of therapy.

Plans will be developed for better utilizing modern methods of communication in continuing education. At the present time, the University of Alabama and Auburn University jointly operate a State Educational TV network which covers approximately 90 per cent of the State. As a part of planning it will be determined whether the existing facilities could be used part time for transmission of educational programs between the University Medical Center and hospitals throughout the region. The trained personnel already available in the State educational TV network would provide a source for consultants and possibly for recruitment of a fulltime individual to work on this aspect of the planning program. This planning will include not only the matter of facilities for transmitting and receiving television communication, but also the types of information that can be effectively transmitted in a program of continuing education. Such programs might include regularly scheduled conferences at the Medical Center or elsewhere, diagnostic procedures or even consultations. It should also be determined to

what extent recording educational material and programs on video tape for delayed transmission would be effective in a continuing education program.

Other aspects of the communications problems concern the feasibility of utilizing bi-directional television systems for remote consultations regarding unusual patient problems. Such a system would serve simultaneously as a highly effective means of facilitating continuing education. Modern methods of data transmission would allow transmission of electrocardiograms, phonocardiograms and x-rays in such activities.

Medical Libraries

The needs of intermediate and peripheral centers for medical libraries should be determined and plans developed for establishing optimal relationships between them and the library at the Medical Center in Birmingham. It is pertinent that the Medical Center has been designated a regional MEDLARS Center for the southern United States and Puerto Rico, by the National Library of Medicine.

Plans for Inter-relationship of Research, Education and Service

The development of specialized Clinical Research and Training Centers for heart, stroke, and cancer at the Medical Center is viewed as providing the core support for a Regional Medical Program. Other grants either approved or pending approval will help make these Centers possible.

During the planning period, the requirements of this program for trained medical and paramedical personnel will need to be defined and plans developed for meeting these needs throughout the region. Furthermore, it will be necessary to determine the need for training personnel in new areas, such as clinical aids for intensive care units. Plans must be developed for anticipating these needs and methods developed for providing training in new areas.

**Research Activities in Relation to the
Regional Medical Program**

Hopefully, new methods will be developed for making available to health personnel in the region discoveries that are applicable to clinical medicine. Possibly this could be done through an active continuing education program and through an improved system of communication throughout the region.

The Medical Center has a well developed and active computer center which could support this regional program. Facilities at present include an IBM 7040 computer, a Digital Equipment Corporation PDP-7 data processor with analog to digital capabilities, and an IBM 1401 computer. Active research programs are underway in the diagnosis of heart disease by on-line analysis of vector electrocardiograms, phonocardiograms, arterial volume pulses, kinetocardiograms, and similar information.

The feasibility of having some of the intermediate hospital laboratories linked to the University computer center will be explored during the planning period. Utilization of these computer facilities for the operation and evaluation of the Regional Program will also be explored.

Program Evaluation

The Regional Advisory Committee will develop plans for a continuing evaluation of the Regional Program. The Medical and Dental Schools as well as hospital administration of the Medical Center will develop plans for evaluating intramural aspects of the program. A standing extramural committee has already been appointed and the members have agreed to serve; this committee will not only assist in evaluation, but will be utilized on an ad hoc basis for advice about specific problems.

Administrative Structure

During the period of planning, feasibility studies, and operational aspects of the Regional Medical Program, the Regional Ad-

visory Committee will continuously advise concerning policies and the conduct of this Program and review the progress of the Program. The policies established for conducting this program and the manner in which these policies are carried out will require approval of this Committee.

The Medical Center of the University of Alabama in Birmingham will act as the grantee institution and will assume administrative responsibility for conduct of this Regional Medical Program. The University will, with approval of the Regional Advisory Committee, appoint a Director, Assistant Director, and staff to plan for this Program. These administrators will be given University appointments and the Medical Center will follow University policies in making these appointments.

More specific administrative features of operational aspects of the Program will be developed during the planning phase through meetings with the State Advisory Committee, cooperating hospitals, State Board of Health, State and County Medical societies and the faculty and administration of the Medical Center.

Diets For Heart Patients

Heart attack patients on a low-fat, cholesterol-lowering diet have fewer recurrences and a much lower death rate than those not on a controlled diet. This is the conclusion of a five-year controlled study of 200 men aged 20 to 50, all with previous myocardial infarctions, reported by Dr. Marvin L. Bierenbaum of the Arteriosclerosis Research Center, Montclair, N. J. Men in the control group, eating a typical American diet containing 40 to 45% fat (most of animal origin), had a heart attack recurrence rate one and one-half times higher and an overall death rate two and one-half times higher than patients restricted to a 30% fat diet.—*Modern Med.*, Nov. 22, p. 75.

"Take a laxative" is a harsh sentence

Although there are more than 60 ethical laxatives available for the constipated patient, many, unfortunately, do not really produce an effect much like a normal bowel movement. Instead they whip the bowel, torment it and leave it irritated, inflamed and exhausted.

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provides a nearly normal movement. Through its unique contact action it induces the kind of natural contraction waves of the colon necessary for gentle, complete, comfortable bowel movements. For your next constipated patient, try Dulcolax—the laxative with the gentle touch.

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at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food¹⁻³

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.^{1,2} Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.^{1,3}

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of

staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Ilosone® 
Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone. **Contraindications:** Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to

be definitely related to use of the drug, laboratory findings characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalofluorescent flocculation and thymol turbidity tests, elevated serum gamma-glutamyl oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given to 2 Gm. of the drug daily for periods of two to six months. Patients with rheumatic fever have taken prophylactic 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels determined in a group of fifty-four adults and children with 250 mg. of Ilosone daily for an average of sixteen months in rheumatic fever prophylaxis. The results were comparable to those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevations of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity reported in 102 pediatric patients who received short-term (one to ten day) courses of Ilosone in the treatment of streptococcal infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a side effect of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacillary flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally. Ilosone Pulvules®, Ilosone Chewable Tablets, Ilosone Drops, Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds weight, the usual dosage is 5 mg. per pound every six hours. For children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dose is 20 to 30 Gm. given in divided doses for a period of ten to twenty days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended during the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four weeks is recommended. In the treatment of gonorrhea, patients suspected of lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: *Am. J. M. Sc.*, 244, 1967. 2. Griffith, R. S., and Black, H. R.: *Antibiotics & Chemotherapy*, 12, 1967. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: *Am. J. M. Sc.*, 239, 1967.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.



"All Otolaryngologists are Alike"

Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

Wrong! But that's no more preposterous than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more exacting. In fact, there are at least nine specific differences involving moisture content, purity, potency and speed of tablet disintegration,

which make the manufacture of Bayer® Aspirin so different.

These Bayer standards result in significant product benefits, including gentleness to the stomach and product stability, that enable Bayer Aspirin tablets to stay strong and gentle until they are taken.

So next time you hear someone say that *all* aspirin tablets are alike, you can say, with confidence, that "it just isn't so."

You might also say that all otolaryngologists aren't alike, either.





The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—The National Institutes of Health is concentrating its efforts in the artificial heart field to support of programs for development of auxiliary heart-pumping devices instead of a complete artificial heart.

The auxiliary device approach includes the programs led by Dr. Michael E. DeBakey of the Baylor University College of Medicine in Houston and Dr. Adrian Kantrowitz, chief of surgical services at Brooklyn's Maimonides Hospital. Other teams working on developing complete artificial hearts will continue their research, but the government will not emphasize their approach.

The decision to forego for the present a major program to build a complete artificial heart was made by Dr. James A. Shannon, NIH director, after he determined that not enough fundamental information existed on just how the heart operates to make such a project feasible.

Dr. Kantrowitz described the problems involved in designing artificial heart devices in a speech at a meeting of the American Society of Mechanical Engineers in New York.

"The heart is not a simple pumping device. It receives thousands of signals from other parts of the body," he said.

"For example, when a good-looking blonde walks down the street, your heart speeds up.

To make mechanical hearts respond to a blonde will not be so easy. It's better to leave the heart in place to respond to all these signals and make a mechanical pump as an auxiliary device to do most of the work."

Dr. DeBakey is working toward development of a device that would allow the heart to rest long enough for it to recover its strength and resume its role in the body without assistance. Dr. Kantrowitz is working toward development of an implantable auxiliary device that would permanently aid those whose hearts cannot function adequately alone. Both these approaches and others similar to them are of the type the institute want to support.

"We want to develop both a family of highly efficient shortterm devices to tide people over acute heart attacks and also completely implantable heart-assist devices," a NIH spokesman said.

"Then, after this type of development is worked out and devices have been proven in clinical trials with a high degree of reliability and it looks like total heart replacement is feasible, we will push toward that goal."

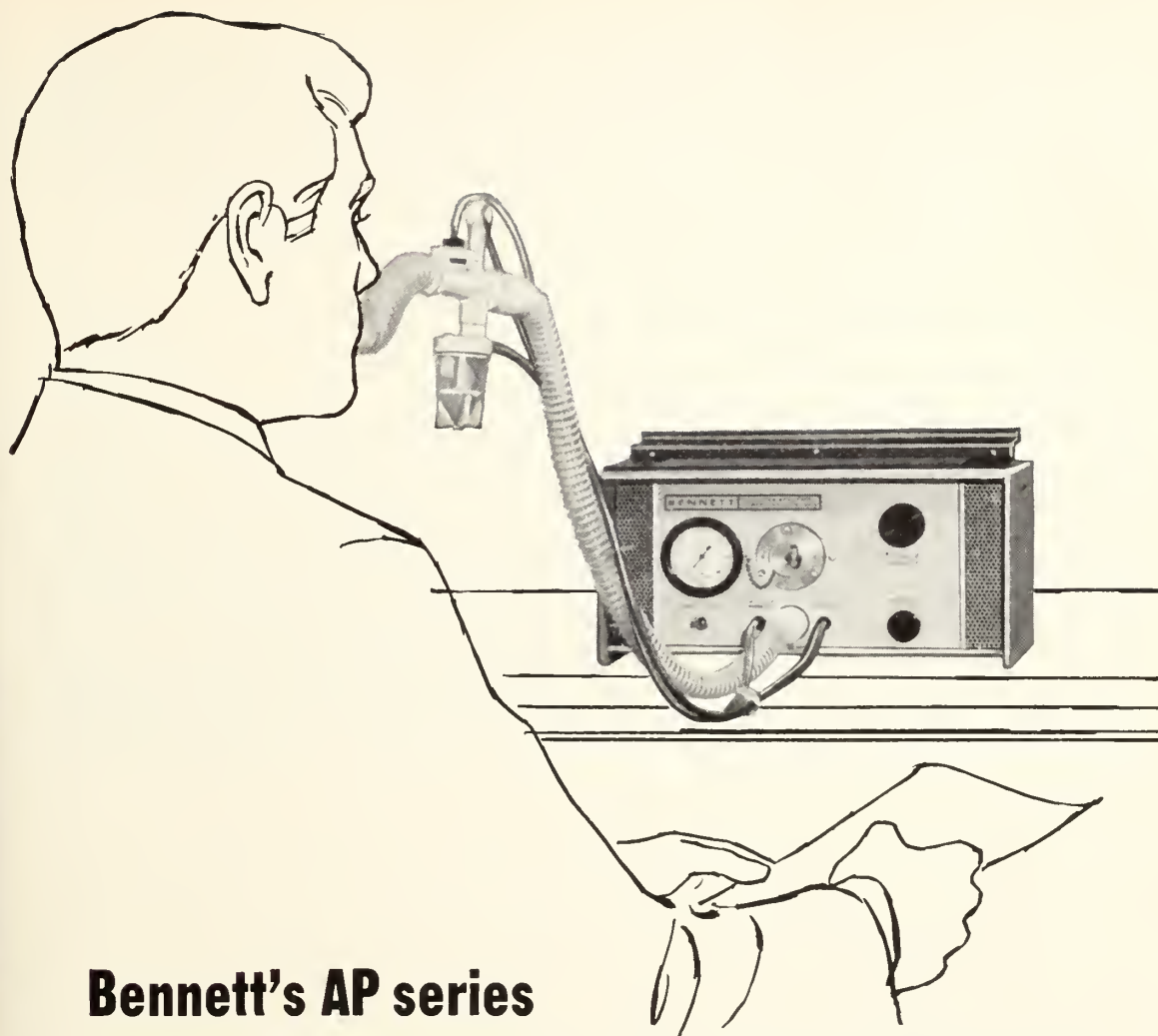
Dr. Kantrowitz praised the partnership between physicians and engineers necessary in the artificial heart field but he said efforts must be made to ensure that leadership in the research must remain with the medical profession and not be given to engineers who do not fully understand the medical problems involved.

* * *

Obesity has become a major health problem in the United States and a special health hazard for three obesity-prone groups, according to the Public Health Service.

Quoting a new PHS source book for health professionals, OBESITY AND HEALTH, the Service said that the prevalence of obesity in this country is a source of growing medical concern because "fat people are more likely to develop certain diseases and to die

(Continued on Page 872)



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Bennett's AP units are therapeutically efficient. The famous, flow-sensitive Bennett Valve—the valve that "breathes" with the patient—gives proper control of pressure patterns. The Bennett/Twin Nebulizer (included with all AP

Models) provides optimum volume and particle size for medication and humidification. Oxygen enrichment may be added with other Bennett accessories.

Bennett makes two AP models—the portable AP-4, as shown and the economy Model AP-5. Both are electrically operated, quiet, compact and quality built.

Bennett IPPB equipment is sold or rented only on prescription by a physician or on order of a hospital or other recognized medical institution.

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(Continued from Page 870)

at an earlier age than people of normal weight."

Prime candidates for the development of obesity and its attendant association with certain serious disorders and possible early death, according to the PHS, are:

1. Children whose relatives are obese: In one study, 73 per cent of 1,000 obese patients had at least one obese parent.
2. Heavily built persons who also have corpulent tendencies: Obese individuals usually have a heavier physique than their non-obese counterparts. Large-boned and thickly muscled persons, particularly adolescents, who fit this description should be watched closely.
3. Persons who are becoming less active, more sedentary: Food intake does not decrease proportionately with decrease in energy expenditure. As activity decreases, for whatever reason, the risk of developing obesity increases.

The Service said that while a substantial amount of obesity exists at every age in both sexes, obesity in children and adolescents is a particularly discouraging omen for the future.

"Obese children and adolescents are a major reservoir for obesity in adult life," the source book said. "They are more likely to remain obese as adults and to have more difficulty in losing fat and maintaining fat loss than people who become obese as adults."

* * *

No bottle of children's aspirin sold after July 1, 1967, will contain more than 36 tablets in a joint government-industry effort to reduce accidental overdose.

This restriction was one of several steps announced jointly by the Food and Drug Administration and 32 drug firms after a conference aimed at curbing childhood deaths and illnesses.

Also by July 1, bottle of children's aspirin will contain this cautionary label:

"Precaution: No cap is 100 per cent child-proof. In case of accidental overdose, notify physician immediately."

Also agreed on was a limitation in the potency of children's aspirin. Some now range as high as 5 grains a tablet. The new limit will be 1¼ grains.

* * *

Dr. William H. Stewart, Surgeon General of the Public Health Service, says the nation's hospitals need 20 per cent more professional and technical workers—primarily nurses—to provide the best patient care.

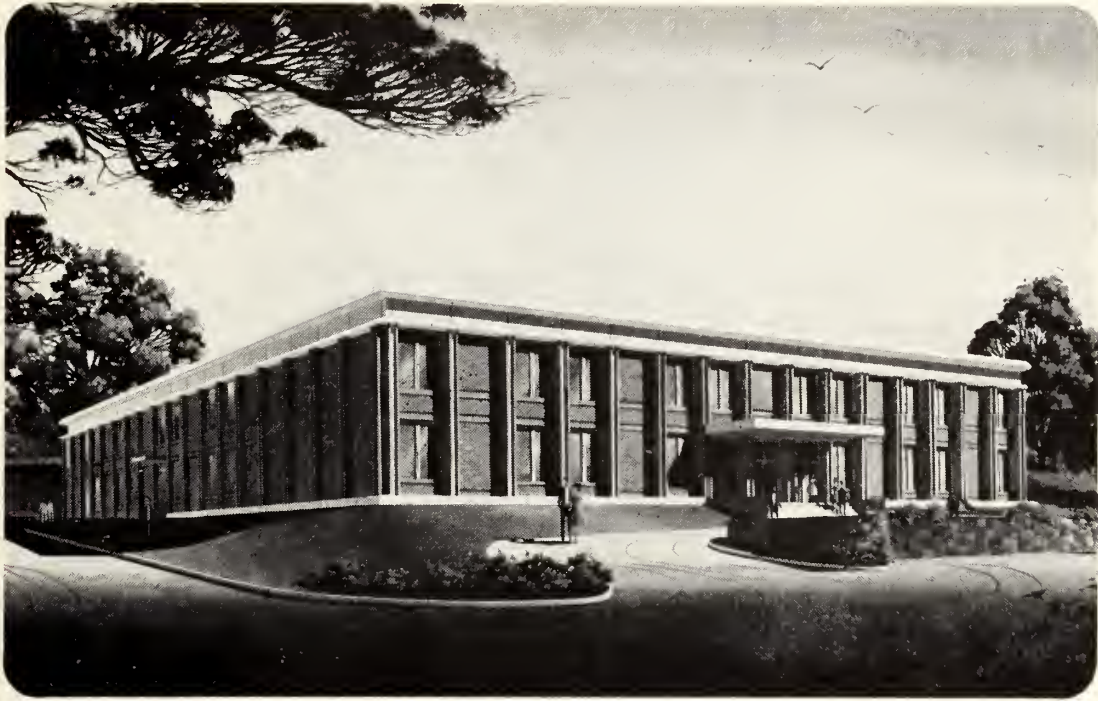
Stewart's statement accompanied a joint U. S. Public Health Service-American Hospital Association survey which showed that more than 80,000 additional nurses and 40,000 practical nurses are needed, plus 50,000 aides in general hospitals, 30,000 in psychiatric institutions, 9,000 medical technologists, 7,000 social workers and 4,000 physical therapists, X-ray technologists and surgical technicians.

* * *

John W. Gardner, Secretary of Health, Education and Welfare has appointed a six-member Task Force on Environmental Health and Related Problems and instructed it to "think at least 50 years ahead."

Chairman of the Task Force is Ron M. Linton, who was, until last September, staff director of the Senate Committee on Public Works and is now associated with Urban America, Inc.

The Task Force will be concerned, Linton said, not only with such obvious threats to health as air and water pollution but with "crowding, noise, lack of open space, lack of mobility, dirt." The Task Force will hold hearings in a number of cities, and is scheduled to report to Gardner by June 1, 1967.



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

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Alabama Department of Public Health



A State Health Department Program In X-Ray Protection

Ira L. Myers, M. D., M. P. H., F. A. P. H. A.

Insidious factors influencing health are difficult to control. A dripping faucet is a persistent annoyance—irritating in the still of night, needlessly wasting resources, and capable of causing damage by its cumulative effects. Yet even location of the dripping water may be critical. For example, water slowly dripping on the forehead of a captive was a slow cumulative and progressive method of death by torture in medieval times. In this instance, life-giving water was changed to a death-dealing drop. The fatal effect of the supposedly “insignificant” is the idea which I wish to convey. Frequently, the recognition that the “insignificant” is important leads a health department into a new control program. This is the case in x-ray protection.

In public health, x-rays have been used in case finding, in diagnosis, and later in treatment. For over 36 years, the Alabama Department of Public Health has used x-rays

Ira L. Myers, M. D., State Health Officer, Alabama Department of Public Health, State Office Building, 501 Dexter Avenue, Montgomery, Alabama 36104.

This paper presented on Tuesday, November 1, 1966, at a joint meeting of the Radiological Health and Occupational Health Sections, American Public Health Association Meeting in San Francisco, California.

extensively in surveys to find cases of tuberculosis and other cardio-pulmonary diseases. These applications, however, were primarily medical.

With the advent of the atomic bomb and its military uses, radiation was recognized as a problem for all people everywhere. Its immediate and long-range effects became the topic of the day. Although environmental control has long been acknowledged as essential to public health, our past efforts have been directed toward the control of immediate and direct effects such as food sanitation, water treatment, vector control, industrial waste, and excreta disposal. In this nuclear age, however, it was necessary to extend environmental control to include the unseen, cumulative, and delayed ill effects of ionizing radiation from all sources. In the early nineteen-fifties, the hazards of the x-ray shoe fitting devices were recognized and thoroughly investigated. As a result, these machines were completely eliminated.

Environmental health specialists had previously become interested in the industrial hazards of radiation due to the occurrence of cancer in radium watch dial painters.

Scientific control of modern uses of atomic energy developed rapidly in the hands of

engineers, physicists, and research scientists.

Fear of bizarre or unknown genetic changes and the association between radiation exposure and certain degenerative diseases, coupled with a decrease in the life span, led to studies in background radiation levels and surveys of sources of radiation in the environment.

In the late fifties, the Alabama Department of Public Health began its control efforts by measuring base line levels of radioactivity. Our Bureau of Sanitation initiated a study of reference measurements of radioactivity in surface waters. This program of our sanitation laboratory marked the beginning of comprehensive radiological health activity in Alabama.

Professional concern developed nationally over radioactive iodine, heavy metals, and their salts appearing in foods and milk as a result of nuclear testing. Underground tests in salt domes of Mississippi pointed out the obvious need for background reference measurements in surface waters, ground waters, and air samples from various parts of Alabama.

Even before the citizens of our state recognized the importance of a fully developed program, we spent several years in training staff and in preparing for medical and dental support. Selected engineers in the bureau were sent to training facilities to become proficient in radiation physics.

Dental societies became interested in safe use of x-ray units in dental offices. Their interest and support provided the stimulation necessary for a state-wide dental equipment survey. Requests were received asking that machines be surveyed for defects or errors in collimation and filtration. About this time, physicians felt that they, too, needed assistance to prevent unnecessary radiation to themselves and their patients.

In 1963 a Dental X-ray Survey Program was initiated. This survey was successfully completed by using dental students who had

been given a brief course in survey techniques and recording by competent doctors and scientists. Criteria established by the American Academy of Oral Roentgenology were used in determining the adequacy of filtration and collimation. A total of 708 units was inspected for proper collimation and filtration. Where deficiencies in these items were found, adequate filters and collimators were installed without cost to the dentist.

In 1964, the initial medical x-ray unit registration and survey also utilized medical and dental students. Although successful, the results disclosed many problems; and several of the doctors developed a defensive attitude. The complexity of these medical units combined with the inexperience of the student surveyors led to some problems which, although minimal, were troublesome. Many of the inspected items were physical and were easily observed and measured. A total of 968 radiographic and fluoroscopic x-ray units were inspected during the survey. The owners of the x-ray units were notified of any deficiencies found by the survey teams and requested to correct the deficiencies noted. This was a voluntary program and the cooperation received from the medical profession during the survey was commendable. The permanent x-ray control program required a follow-through in order to preserve earlier gains and assure further progress.

If we were beginning again, we would attempt to avoid the initial minor difficulties encountered in the medical x-ray unit survey. This might be accomplished by securing more professional supervision or by waiting for adequate permanent staff to complete their training.

During this survey period, a radiological health laboratory was being developed. This laboratory complemented and expanded the scientific evaluations made by the technical staff. Measuring devices for accurate deter-

minations were a prerequisite to professional confidence in the program. These devices included equipment for radium leak testing.

Radium was the original useful source of radiation. It is strange, however, that this source has been the most neglected when controls are established. Even the Atomic Energy Commission was not charged with the responsibility for the control of potential dangers of radium sources. Before the 1963 Alabama radiological health law was passed, there was a pilot study in Jefferson County (Birmingham) of all radium sources to determine the presence and extent of problems involving leaking encapsulations or other contaminations. This study was performed with the cooperation of the U. S. Public Health Service, the State of Alabama, Department of Public Health, and the Jefferson County Health Department.

Experience from this study led to a leak-testing survey state-wide. The program was well received by the profession, although many previously unknown and unidentified radiation hazards were located. Of the thirty facilities having radium sources, thirteen or forty-three per cent had leaking or contaminated sources. The leaking sources were re-encapsulated or disposed of through approved channels without coercion. This program was promoted by the health department as a safety and service program, rather than a policing and enforcement activity.

Since the Medical Association of the State of Alabama is the State Board of Health by law, the interest of organized medicine in the public health aspects of unnecessary radiation formed a solid basis for the support of state legislation. A bill designed to provide Alabama with a good radiological health statute was passed in late September of 1963. The statute gave the State Board of Health strong authority. It provided for an advisory committee and gave the board power to make and enforce rules and regulations.

Our broadly representative advisory board is composed of educators, scientists, research

physicists, radiologists, legislators, physicians, dentists, chiropractors, industrialists, and veterinarians.

The Board of Health established a progressive x-ray safety plan utilizing information from the earlier surveys. This activity involved the adoption of reasonable regulations. We are convinced that the adoption of unreasonable, oppressive, or arbitrary controls or the application of reasonable regulations without common sense and courtesy will assure early failure of any control effort. These new rules and regulations covered all x-ray units in use by the medical and dental arts profession, including those in the offices or clinics of chiropractors, medical, dental, and veterinary practitioners, as well as all devices in hospitals or similar public diagnostic facilities and industry.

The regulatory inspection consists of a physical survey of x-ray units to determine compliance with the requirements of the agency. The state statute gives our agency undisputed jurisdiction. Because of its straightforward role, the agency functions effectively in this arena.

A re-survey of these medical x-ray units by our permanent technical staff has been well received and is presently 95% complete. Approximately half of these units needed some corrections on the re-survey. Many of these have been corrected by filters, collimators, or adjustments.

After a state has completed the first step of a radiation program of registering and inspecting all x-ray units and has sought compliance with the physical requirements, increased attention should be directed toward the education and training of operators.

Reduction of exposure may involve such things as the use of the fastest available film and screens or shields and/or a thermometer and clock in the dark room of every installation. However, these may never be used or used correctly. To achieve this objective, the technician would be required to actually develop the film according to the time-tem-

perature instructions provided by the film manufacturer.

The proper use of collimators and other mechanical equipment is another means of reducing exposure. The presence of collimators in the doctor's office or variable collimators on the x-ray units themselves does not insure that they are or will be properly used. In some instances we have inspected installations where the technician did not know that various size cones were available in the cabinet a few steps away. A variable collimator on an x-ray unit is useless if the technician does not know how to use it or does not use it properly.

X-ray exposure also varies with the technique employed in the examinations. The technique chosen must give the desired information and result with the lowest patient dosage. For example, an acceptable x-ray may be over-exposed and under-developed resulting in unnecessary irradiation.

A significant reduction of exposure to the patient may also be achieved by sound professional judgment. Here, the attending physician decides the necessity for an x-ray. When he orders an examination, the doctor should be specific and request no more views than are required for the safety of the patient. To protect himself and the patient, the doctor must weigh the hazard of the examination against the expected value of the findings. Presently, it appears that the trend is toward more views per examination.

The educational goal is to impress upon the operator the necessity of utilizing available equipment, judgments, and techniques in a manner that would provide the best radiographic results and the elimination of unnecessary exposure.

The educational role of a state program appears quite nebulous. In our experience, educational goals are not as attainable as the identification of physical strengths and weaknesses. Furthermore, the results of educational efforts are not easily measured.

The reduction of unnecessary x-ray exposure by professional education and techni-

cian training is not amenable to regulation. Motivation is the key and must begin with the healing arts profession.

To be successful, radiation safety support must be secured from the physicians, as well as the x-ray technicians. If the doctors are unconcerned or uncooperative, the efforts of a regulatory agency will have little effect in reducing the exposure of the patient to ionizing radiation.

Most states are not prepared to perform at all in the area of judgment and technique on the part of the attending physician. At the present time, the radiological health programs in most states do not include personnel with adequate training who can discuss judgment factors with radiologists and other physicians. We feel that this is an area that needs attention. This exceeds our capability and deserves attention by a highly competent national group. Of course, it would seem desirable for the medical profession to police itself.

We have discussed various methods whereby unnecessary x-ray exposure to patients may be reduced. It is obvious that this is not a unilateral action, but involves cooperation by all parties. In order to effectively reduce the exposure of the public to unnecessary radiation, a strong bond of cooperation must exist between the state radiological health program, the medical profession, educational agencies, and other state and federal agencies, including the United States Public Health Service and Atomic Energy Commission. Close cooperation already exists between the state and the Public Health Service, but we must cultivate more active relationships with the medical profession. It is obvious that if the medical profession is resentful of the state's radiological health program, the most that can be accomplished is the installation of certain safety items on x-ray machines. We have pointed out earlier, this is only one part of the problem. In order for the regulations of any state to really be effective, the safety items required must be properly used by the physicians and technicians.

DEPARTMENT OF HEALTH

It becomes particularly apparent in the area of medical judgment that the improvements must be initiated by the physicians themselves. They must take the lead in developing and utilizing techniques which will reduce the patient dose to a minimum.

It appears that the best criteria upon which to judge the effectiveness of a state x-ray protection program is the degree of cooperation the program receives from the healing arts professions within the state. The effectiveness of this partnership is probably the most important factor in reducing x-ray exposure to the public. Once the medical profession fully supports the state radiological health program, it is merely a matter of time until a significant reduction in unnecessary x-ray exposure to the public is assured. This principle is the basis of our success.

SUMMARY:

1. The cumulative ill effect of unnecessary radiation is a public health problem deserving environmental and professional control measures.

2. The Alabama Department of Public Health initiated its protection efforts by recording measurements of base line radioactivity.

3. The dentists backed a very successful survey and correction program for deficiencies in filtration and collimation of their x-ray machines.

4. The medical x-ray unit registration, inspection, and regulation program including all professional sources was well received and is being extended to industrial sources with a minimum of problems.

5. The radium leak testing service proved to be an outstanding contribution to the control effort.

6. Although correction of mechanical and equipment defects is an important phase of x-ray protection, the operational and educational needs must be directed toward the improvement in methods, techniques, and judgments by all personnel.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph. D., Director

November 1966

Examination for Intestinal Parasites	1,373
Examination for Malaria	0
Salmonella & Shigella	
(blood-feces-urine-food)	247
Examination for tubercle bacilli	4,041
Examination for gonococci	1,810
Serological test for syphilis	26,118
FTA	14
Darkfield	1
Brucella	0
General Bacteriology (culture for isolation and confirmation)	16
Staphylococcus (cultures for isolation and confirmation)	345
Examinations for diphtheria	16
Streptococci examinations	2,468
Mycology	22
Agglutinations	22
Vincent's infection	0
Complement fixation tests	113
Test for Phenylketonuria (PKU)	6,816
Cytology	713
Water examinations	2,389
Milk and dairy products examinations	4,835
Sea food examinations	139
Examination for Negri bodies (smears & animal inoculation)	317
Virology	4
Rh Factor	568
Miscellaneous	583

TOTAL 52,970

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director
Current Morbidity Statistics

	1966	Oct.	Nov.	*E. E. Nov.
Tuberculosis	108	85	107	
Syphilis	133	98	117	
Gonorrhea	334	381	265	
Chancroid	1	0	2	
Typhoid fever	0	0	1	
Undulant fever	1	0	0	
Amebic dysentery	2	3	3	
Scarlet fever & strep. throat	610	509	94	
Diphtheria	1	1	6	
Whooping cough	2	7	10	
Meningitis	6	9	6	
Tularemia	0	0	0	
Tetanus	1	3	1	
Poliomyelitis	0	0	2	
Encephalitis	0	0	0	
Smallpox	0	0	0	
Measles	26	42	41	
Chickenpox	2	20	15	
Mumps	16	32	32	
Infectious hepatitis	38	29	36	
Typhus fever	0	2	0	
Malaria	0	1	0	
Cancer	828	619	493	
Pellagra	0	0	0	
Rheumatic fever	26	9	15	
Rheumatic heart	21	26	24	
Influenza	137	72	96	
Pneumonia	153	272	233	
Rabies—Human cases	0	0	0	
Pos. animal heads	4	0	0	

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.



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**It's easy
for children to get
otitis media...**



and Gantanol Suspension is a good way to help them get well

Proven effectiveness against major U.R.I. pathogens including beta-hemolytic strep

With Gantanol (sulfamethoxazole), bacteriologic conversion rates for beta-hemolytic streptococci are comparable to those generally seen with penicillin, and apparently superior to those cited in the literature for erythromycin and the broad-spectrum antibiotics.^{1,2} With conversion rates ranging from a high of 96% in 229 patients² and 98% in 96 cases³ to 65% in 105 cases,^{5,6} Gantanol (sulfamethoxazole) Suspension is an effective alternative therapy in patients sensitive to penicillin, the drug of choice in known beta-hemolytic streptococcal infections.

In addition to this effectiveness against beta-hemolytic streptococci,¹⁻⁹ bacteriologic conversion rates have averaged 69% for *pneumoniae* (103 of 150 patients),^{3,6,7} 78% for *H. influenzae* (2 of 54 patients),^{3,4,7} and 67% for *Staph. aureus* (76 of 113 patients).^{3,4,6,7} It is this wide spectrum of activity which makes Gantanol (sulfamethoxazole) Suspension a good choice in acute pharyngitis, tonsillitis and otitis media.

hemolytic strep

aph. aureus

pneumoniae

influenzae



Therapy generally uncomplicated by side effects

Over 8 out of 10 U.R.I. patients—87% of 2231 patients—showed an excellent to satisfactory clinical response to Gantanol (sulfamethoxazole).¹⁻¹³ Such favorable results are even more meaningful in view of the fact that only 1.1% of the more than 2000 cases of discontinued therapy because of side effects. Of the total side effects reported (4.6%), most were mild and included rash, urticaria, itching, dizziness, headache, diarrhea, nausea and vomiting, tingling sensation, skin discoloration and crystalluria.¹⁻¹³

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute and chronic respiratory and urinary tract bacterial infections due to susceptible microorganisms. At present penicillin is considered the drug of choice in acute group A beta-hemolytic streptococcal infections; however, Gantanol (sulfamethoxazole) has shown an effectiveness approaching that of penicillin in a large number of patients. If employed in such infections, it is important that therapy be continued in the usual recommended dosage for a period of at least 10 days.

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants or infants during first 3 months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed. Data insufficient on prolonged or recurrent therapy in chronic renal diseases of children.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Following may occur: headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Dosage: *Children*—1 teasp./20 lbs initially, followed by ½ teasp./20 lbs b.i.d. *Adults*—4 teasp. initially, followed by 2 teasp. b.i.d. or t.i.d., depending upon severity of infection.

How Supplied: Suspension 10%, 0.5 Gm sulfamethoxazole/5 cc teasp., cherry-flavored, bottles of 16 oz.

References: 1. Braden, B.; Colmore, J. P., and Cummings, M. M.: *Antimicrobial Agents Annual*—1960, p. 54. 2. Alban, J.: *Am. J. Dis. Child.*, 109:304, 1965. 3. Elia, J. C.: *Eye Ear Nose & Throat Month.*, 41:722, 1962. 4. Carter, C. H.: *Clin. Med.*, 71:1571, 1964. 5. Jackson, H.; Cooper, J.; Mellinger, W. J., and Olsen, A. R.: *Southwestern Med.*, 44:246, 1963. 6. Reichelderfer, T. E.: *Clin. Med.*, 71:1045, 1964. 7. Peters, J. H.: Scientific Exhibit presented at the Spring Meeting of the American Academy of Pediatrics, April 26-29, 1965. 8. Peters, J. H.: *Antimicrobial Agents and Chemotherapy*—1961, p. 406. 9. Braden, B., and Colmore, J. P.: *J. Oklahoma M. A.*, 57:7, 1964. 10. Chastain, P. J.: *J. Florida M. A.*, 48:816, 1962. 11. Grater, W. C.: *Antibiotics & Chemotherapy*, 12:450, 1962. 12. Exline, A. L.: *Colorado GP*, 5(5), 11, 1963. 13. Patton, J. M.: *West. Med.*, 5:46, 1964.

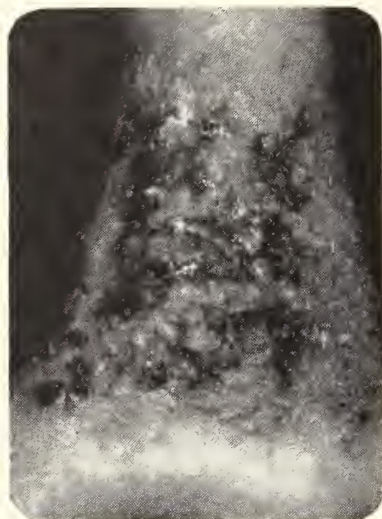
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Gantanol[®]
(sulfamethoxazole)
Suspension

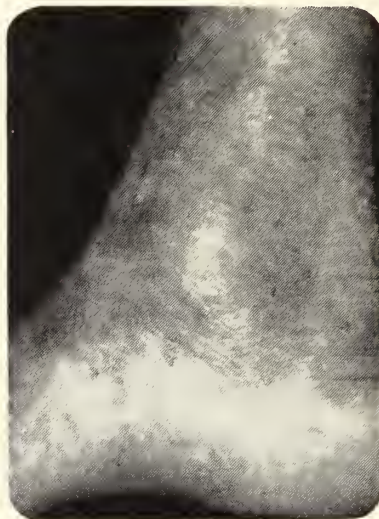
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Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side

effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive non-permeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyodermas will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

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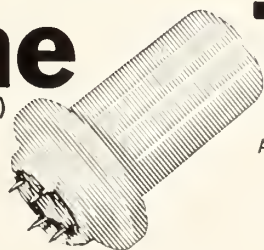
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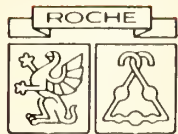
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Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Warn against hazardous occupations requiring complete mental alertness. Use caution in administering to addiction-prone patients or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of child-bearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In elderly and debilitated and in children over five, limit dosage to smallest effective amount, increasing gradually as needed and tolerated. In general, concomitant use with other psychotropics is not recommended. Paradoxical reactions have been reported in psychiatric patients and hyperactive aggressive children. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Observe usual precautions in presence of impaired renal or hepatic function, impending depression and suicidal tendencies.

Adverse reactions: Drowsiness, ataxia and confusion may occur, especially in elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. Syncope occurs rarely. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis, jaundice and hepatic dysfunction) may develop occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy. Individual maintenance dosages should be determined.

Dosage: Oral—Adults: Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d.

Supplied: Capsules, 5 mg, 10 mg and 25 mg—bottles of 50.

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JOURNAL

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IN THIS ISSUE

- Cancer: Some Thoughts On Its Etiology . . . 935*
Perspectives in Cancer 939
Impact of Titles 18 and 19 964
Opinions of the AMA Judicial Council 972

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FEBRUARY 1967

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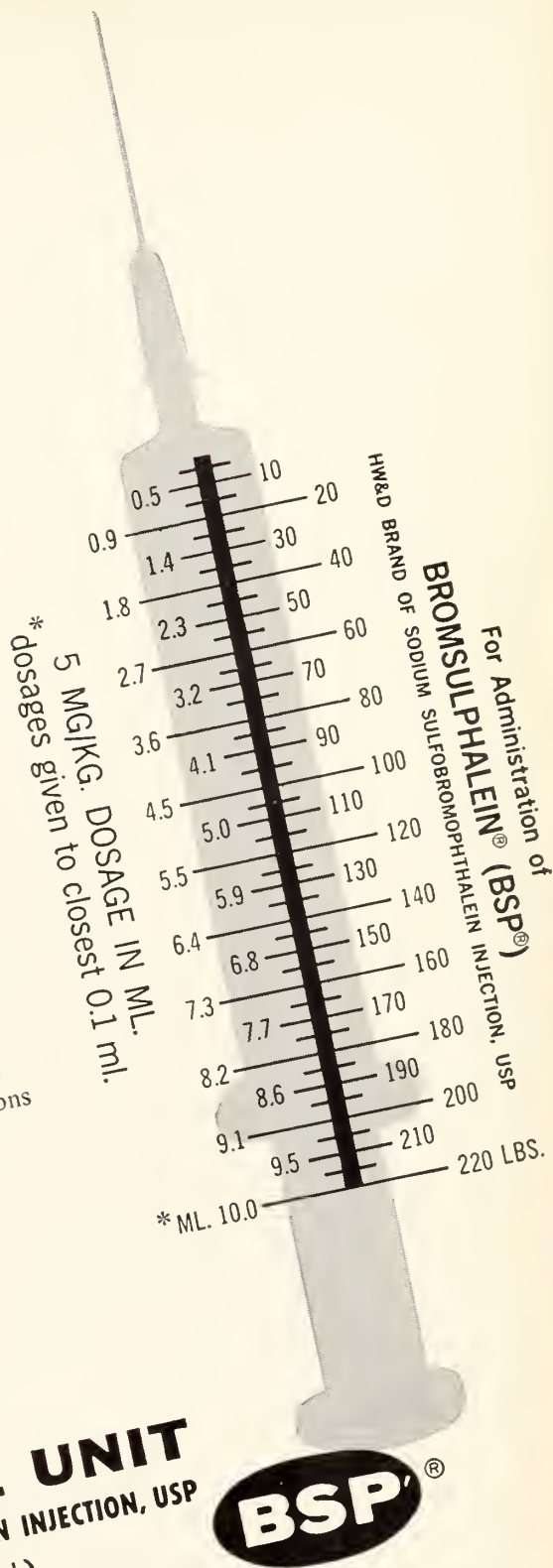
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Brand of phenylephrine hydrochloride

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Also NTZ[®] Solution or Spray
Antihistamine-decongestant

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long established as the broad-spectrum agent of first choice in a wide variety of infections

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*** ESPECIALLY VALUABLE IN U.R.I.**

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Indicated in the therapy of acute severe infections caused by susceptible organisms and primarily by those more sensitive to the combination than to either component alone. In any infection in which the patient cannot be expected to respond to a single antibiotic, the combination is recommended. Signemycin should not be used where a bacteriologically more effective or less toxic agent is available. *Triacetyloleandomycin*, a constituent of Signemycin, has been associated with deleterious changes in liver function. See precautions and adverse reactions.

Contraindications: Contraindicated in individuals who have known hypersensitivity to any of its components. Not recommended for prophylaxis or in the management of infectious diseases which may require more than 10 days of continuous therapy. If clinical judgement dictates therapy for longer periods, serial monitoring of liver function is recommended. Not recommended for subjects who have shown abnormal liver function tests, or hepatotoxic reactions to tetracycline or triacetyloleandomycin.

Warnings and Adverse Reactions: *Triacetyloleandomycin*, when administered to adults in daily oral doses of 1.0 gm. for 10 days, may produce hepatic dysfunction and jaundice. Adults requiring 3 gm. of Signemycin initially should have liver function followed carefully and the dosage should be adjusted as promptly as possible to the usual recommended range of 1.0 to 2.0 gm. per day. Present clinical experience indicates that the observed changes in liver

function are reversible after discontinuation of the drug.

Use with caution in lower than usual doses in cases with renal impairment to avoid accumulation of tetracycline and possible liver toxicity. If therapy is prolonged under such circumstances, tetracycline serum levels may be advisable. In long term therapy or with intensive treatment or in known or suspected renal dysfunction, periodic laboratory evaluation of the hematopoietic, renal and hepatic systems should be done. Formation of an apparently harmless calcium complex with tetracycline in any bone forming tissue may occur. Use of tetracycline during tooth development (3rd trimester of pregnancy, infancy and early childhood) may cause discoloration of the teeth. Reversible increased intracranial pressure due to an unknown mechanism has been observed occasionally in infants receiving tetracycline. Glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and definite allergic reactions occur rarely. Severe anaphylactoid reactions have been reported as due to triacetyloleandomycin. Photosensitivity and photoallergic reactions (due to the tetracycline) occur rarely. Medication should be discontinued when evidence of significant adverse side effects or reaction is present. Patients should be carefully observed for evidence of overgrowth of nonsusceptible organisms including fungi, which occurs occasionally, and which indicates this drug should be discontinued and appropriate therapy instituted. Steps should be taken to avoid masking syphilis when treating gonorrhea.



J. B. ROERIG DIVISION
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President's Page

On the Board of Trustees

On January 12, 1964, a resolution was submitted to the Committee on Constitution and Bylaws of the Medical Association of the State of Alabama by the Jefferson County Medical Society. This resolution proposed the creation of a Board of Trustees to relieve the Board of Censors of certain details related to transactions of Association business and operation of the Central Office. This body was not to be concerned with matters pertaining to the Board of Medical Examiners or the State Committee on Public Health. In April 1964, the report of the Committee on Constitution and Bylaws was adopted at the Annual Session.

Following the required one year waiting period, the Committee recommended proposed changes to the Ordinance of the Association required to create the Board of Trustees and its recommendation was approved by the College of Counsellors and House of Delegates. An executive council of the Board was provided for and was to consist of the President of the Association, immediate past president, the President-Elect, the Secretary-Treasurer, and a member of the Board of Censors.

Since its inception, the Board of Trustees has been actively engaged in handling the affairs of the Association. The actions and recommendations are reported monthly to the Board of Censors for approval or rejection. Now, after eighteen months of operation many of the early areas of uncertainty concerning extent of executive authority have been clarified in such a manner that the



Dr. J. O. Finney

Board of Censors is no longer burdened with details of the day to day operation of the Association and are afforded more time to deliberate on policy matters and major issues confronting our organization. It is to the credit of the Board of Censors that the Board of Trustees has been encouraged to attack the numerous problems of Association business and to fully execute those matters within the confines of delegated jurisdictions. Such an attitude was essential to the success of the Board of Trustees and necessary if the purpose for which it was established was to be realized.

Among its many other major accomplishments, the members of the Board of Trustees together with the staff of the Central Office, performed brilliantly in organizing the press conference called to enlighten the people of our State relative to our position on Medicare and in arranging the called meeting of the College of Counsellors and House of Delegates on November 6, 1966.

PRESIDENT'S PAGE

The Board of Trustees consists of one member from each Congressional District, the four regional Vice-Presidents, the Past-President, the President, the President-Elect and the Secretary-Treasurer. In addition one member of the Board of Censors sits, without privilege of vote, at each meeting to lend advice and to, at times, give back-ground information not otherwise available to the Trustees.

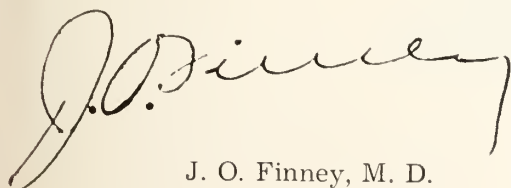
The current composition of the Board is as follows:

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Having served for some years on the Board of Censors and now on the Board of Trustees I can say without equivocation that the members of the latter are discharging their responsibility to the Association with the same devotion, intelligence and skill which has traditionally characterized those sitting on the Board of Censors.

Seek out the Trustee from your district and your Vice-President and thank them for their dedication and willingness to work for you.

Sincerely yours,



J. O. Finney, M. D.
President

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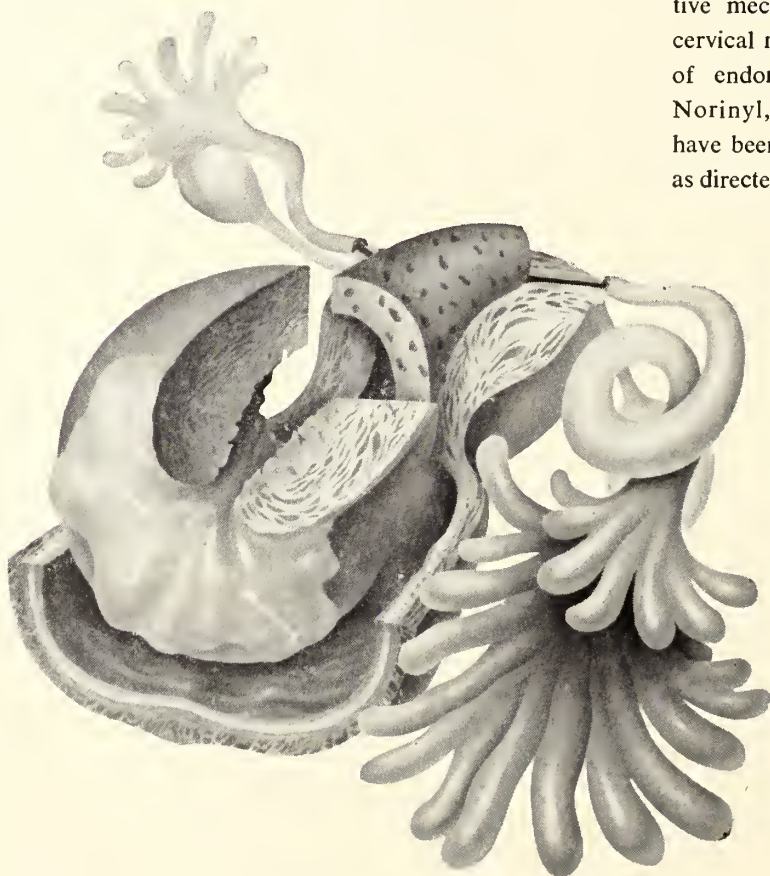
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**production of a cervical mucus hostile to
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to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

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An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, O. O.: Ibid. 6. Rice-Wray, E.: Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. O.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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The Woman's Auxiliary

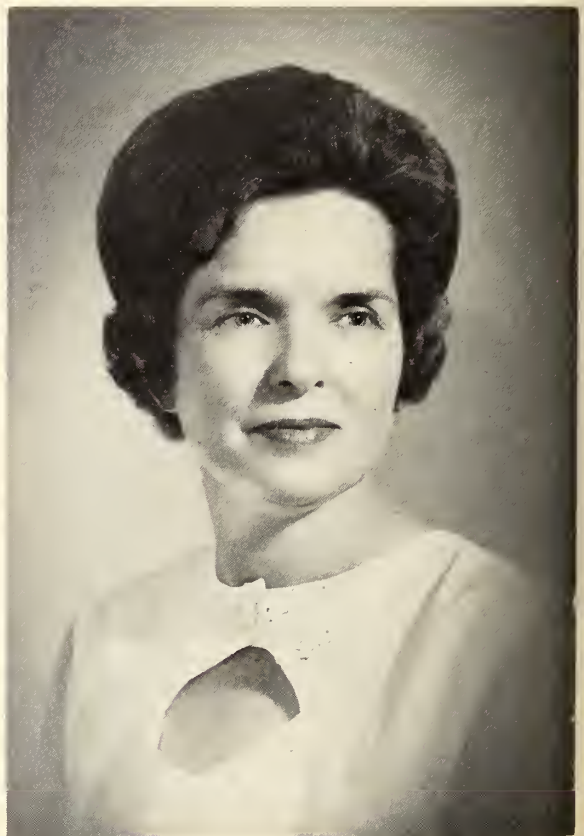
ALABAMA AUXILIANS ASSUME ROLES IN COMMUNITY HEALTH EDUCATION

"The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health . . . Informed opinion and active cooperation are of the utmost importance in the improvement of the health of people."
(Preamble, World Health Organization constitution)

To preserve what is left of our husband's right to practice medicine as he believes, medical auxilians are taking an active part in the affairs and future of the health of our communities. With this aim in mind, our theme for the year; **ACTION AND ACHIEVEMENT FOR BETTER HEALTH EDUCATION**. Every member should adopt Peter Marshall's quotation in this endeavor: "May we, God helping us, be part of the answer not part of the problem." As a medical auxiliary we are dedicated to support your noble profession as it serves the public on county, state, and national level.

The wife of the doctor is concerned with the health needs of the people in her community, and she is working with other women's groups in two ways; by individual action and by taking action with other auxiliary members. Most auxilians belong to other organizations, and during planning sessions she is offering educated judgments. Awaiting her is the opportunity of interpreting medicine, its progress, its point of view to an appreciative group of friends who otherwise might make ill informed resolutions.

Each county medical auxiliary may become the recipient of packet programs concerning current health problems. Each program contains a selected film list, a question and answer sheet, a fact sheet, and a pertinent sample pamphlet for audience use; a paper prepared by an M. D. which can be read by the program moderator when a speaker is not available, and a procedure guide for program



Mrs. Ira B. Patton

use by auxiliaries and auxiliary sponsored public education programs.

Programs currently available are: **DEVELOPING GOOD HEALTH HABITS**: Demonstrates the value of health education in the physical, mental, and social well-being of our children and youth. It encourages public understanding of the importance of good school health education programs and the role of the school and community health

(Continued on Page 893)



"Yes, Doctor, the pain is gone."

- Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

'Empirin'® Compound with Codeine Phosphate gr. ½ No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning — May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.



Keeps the Promise of Pain Relief

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.



at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food¹⁻³

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.^{1,2} Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.^{1,3}

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of

staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Ilosone® 
Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone. **Contraindications:** Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to

be definitely related to use of the drug, laboratory findings characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given to 2 Gm. of the drug daily for periods of two to six months. Patients with rheumatic fever have taken prophylactic 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who received 250 mg. of Ilosone daily for an average of sixteen months for rheumatic fever prophylaxis. The results were comparable to those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevations of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, have been reported in 102 pediatric patients who received short-term (one to ten day) courses of Ilosone in the treatment of streptococcal infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a side effect of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally in the form of Ilosone Pulvules®, Ilosone Chewable Tablets, Ilosone Drops, or Ilosone, 125, for Oral Suspension.

For infants and for children under twenty-five pounds body weight, the usual dosage is 5 mg. per pound every six hours. For children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended during the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four to five days is recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 100-cc. size packages, with dropper calibrated at 25 and 50 mg. per drop.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: *Am. J. M. Sc.*, 229, 1959. 2. Griffith, R. S., and Black, H. R.: *Antibiotics & Chemotherapy*, 12, 1959. 3. Hirsch, H. A., Pyles, C. V., and Finland, M.: *Am. J. M. Sc.*, 239, 1960.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

WOMAN'S AUXILIARY

(Continued from Page 883)

council. It includes resource material for specific health education areas, e.g., sex education, athletic injuries, teen-age drinking and nutrition.

IMMUNIZATION: Provides factual information on immunization requirements and techniques and on the importance of preventive medicine in achieving and maintaining good health.

VENEREAL DISEASE CONTROL: Two programs available. Program "A" is designed to bring to public attention the alarming increase in teen-age venereal disease. Program "B" is an educational program on venereal disease for youth groups. It identifies early signs and symptoms of venereal disease and shows how the disease invades the body and its course of destruction if not adequately treated. The teen-ager is shown the consequences to himself and to others of promiscuous behavior and the need for individual and community responsibility in venereal disease eradication.

EARLY RECOGNITION OF MENTAL ILLNESS; GEMS: Good emergency mother substitutes.

BLOCK MOTHER PLAN: To help a child in case of emergency in your block as he is going to and from school.

Since 1961 we have been able to secure *A Health Education Service For Schools and Colleges*. On request by a Health teacher in a secondary school or college, one copy will be sent free of charge. (Service may be duplicated, with appropriate credit to the AMA) The chief purpose of the service is to provide teachers with authentic health information. Requests from an auxiliary member and a health teacher should be sent to AMA, Department of Community Health and Health Education, 535 North Dearborn Street, Chicago, Illinois 60610.

—Mrs. Ira B. Patton

Mrs. Ira B. Patton

Sparkling Soft Drinks . . .

pleasure for patients who need liquids



Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

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You can't set her free. But you can help her feel less anxious.

You know this woman.

She's anxious, tense, irritable. She's felt this way for months.

Beset by the seemingly insurmountable problems of raising a young family, and confined to the home most of the time, her symptoms reflect a sense of inadequacy and isolation. Your reassurance and guidance may have helped some, but not enough.

SERAX (oxazepam) cannot change her environment, of course. But it can help relieve anxiety, tension, agitation and irritability, thus strengthening her ability to cope with day-to-day problems. Eventually—as she regains confidence and composure—your counsel may be all the support she needs.

Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilloform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax[®]
(oxazepam)



Wyeth Laboratories
Philadelphia, Pa.



PUBLIC RELATIONS: AN M. D. MUST

As announced earlier in *The Alabama MD*, the Central Office welcomes to its staff Mr. John A. Arnold, a man with wide experience in the fields of communications and public relations.

In addition to his duties as coordinator for the *Journal of the Medical Association of the State of Alabama* and the weekly newsletter, *The Alabama MD*, Mr. Arnold will work closely with the Committee on Public Relations and Communications in an effort to institute or re-institute activities in several areas which have been overshadowed by other projects. He also will work in a liaison capacity with constituent county medical societies to improve communications between those bodies and the state and national medical organizations.

Mr. Arnold is deemed well qualified for his job, having served in a similar capacity with the Montgomery City-County Chamber of Commerce. He is thirty-eight years old, a native of Jamestown, New York, and a graduate of Auburn University with a Bachelor Degree in journalism. Mrs. Arnold is the former Miss Ruth Ray of Alexander City, and they have four sons.

The decision to focus more attention on public relations comes at a time when organized medicine stands in its greatest need of support from the general public and the legislature in its efforts to effectively safeguard the practice of medicine against gov-

ernment encroachment. Many opportunities to fairly present the physicians' viewpoints are available to those who would search for them.

It is hoped that in the days ahead this Association, working with and through the county medical societies, can embark upon a broad new program which would include all of the news media in addition to public appearances before civic clubs and other similar organizations. This method has been used in the past to good effect, and it is a tried and proven method for "winning friends and influencing people."

Even as this editorial is being written, county medical societies throughout Alabama are meeting with members of their respective legislative delegations in a joint effort to familiarize the legislators with problems which lie ahead and to offer medicine's unflinching support in all legislation which promises to further the cause of better health.

In the chaos of conversion to a socialized system of medical care, it is inevitable that misunderstandings will arise on the part of the physician, the patient, or the maker of laws. It is to eliminate these trouble spots that a wise and aggressive public relations program becomes increasingly urgent. If we are to achieve maximum results, the sympathetic understanding, and unwavering support of every Alabama physician is necessary.

Estomul does what standard anticholinergics fail to do—it provides a continuous climate for ulcer healing, eliminating the peaks and valleys of ordinary therapy. It is a comprehensive formulation providing sustained antisecretory effect on gastric activity. A recent study¹ reported a 56% satisfactory response with a maintenance schedule of Estomul in patients refractory to all previous medication. In less difficult peptic ulcer patients, a second study² noted a 94% satisfactory response. Both studies confirmed this clinical improvement radiologically. And both reported unusually prolonged reduction of basal secretion. With a maintenance course of Estomul therapy you can provide this continuous climate for healing in your own peptic ulcer patients.

A continuous climate for ulcer healing

(not simply episodic reduction of secretion or motility)

Estomul[®]

Tablets

Each swallow tablet contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 25 mg.; magnesium oxide, 45 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 500 mg.

Good-Tasting Liquid

Each tablespoon (15 cc.) contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 50 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 918 mg.

Dosage: 1 or 2 tablets or 1 or 2 tablespoons 3 times daily.

Supplied: In bottles of 100 tablets or 12 fluid oz..

Side Effects: Doses in excess of 6 tablets or 6 tablespoons daily may produce dryness of mouth or blurring of vision. Other possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Contraindicated: In glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia and myasthenia gravis.

References: 1. McHardy, G. G., Judice, R. C., McHardy, R. J., and Cradic, H.: Southern Med. J. 59:459 (April) 1966. 2. Slanger, A.: Western Med. 6:205, 1965.



Riker Laboratories • Northridge, California 91324



PHYSICIAN-MINISTER GAP

From reading the headlines and listening to Brinkley or Cronkite one might get the idea that this nation is gripped by a "gaposis" epidemic. There was first the "missile" gap, then later came the "space race" gap. Now there is much ado about the "credibility" gap.

But one more closely related to the medical profession is the gap which has developed between two of mankind's most vital disciplines—medicine and the clergy.

The American Medical Association acknowledged the existence of this chasm in 1961 when it established a Department of Medicine and Religion. Its announced purpose is to bring together physicians and clergymen of all faiths for the study and discussion of their problems for the total welfare of the patient.

It was inevitable that such an effort should be launched. Physicians have long recognized that the religious belief of a patient affects his treatment and cure; clergymen know that in time of illness a man's faith affects his treatment and even his ultimate recovery.

That there has been over a long period of time a gradual breakdown in communication between the physician and pastor cannot be debated. In the distant past the two had worked hand in hand, but in the more recent years of history they had been compartmentalized—the physician was looked upon as a scientist who worked with the body and the clergyman was a philosopher

of sorts who cared for the soul. There was little or no recognition of the possibility, or should we say advisability, of the two professions working together for the total health of the patient.

It was against this background that the AMA launched its program just a few short years ago. Where the program has been initiated on the local level the response from the clergy has been overwhelming. It is most evident that they too sensed the need for better communications, better understanding, in serving the parishioner who is also a patient.

From joint meetings between the two disciplines, long-standing resentments which had existed were brought out in the open, kicked around and in most instances resolved. And the one who profited most from this was neither the physician nor the pastor but the patient.

Several county medical societies in Alabama have initiated medicine and religion programs, under the guidance of the Committee on Medicine and Religion of the Medical Association. Without exception, these county societies have given the program their enthusiastic endorsement.

The state committee, headed by Dr. Sam Marshall of Mobile, is now seeking to persuade each county society to devote one program a year to this theme. This proposition merits the consideration of all societies.

MAKE YOUR RESERVATIONS EARLY
ANNUAL SESSION
JEFFERSON DAVIS HOTEL
MONTGOMERY, ALABAMA
APRIL 20-21-22, 1967

Preventi-Care or Preventi-Thought?

The name of the game is The Name when it comes to labeling federal activities in the field of health care, says an editorial in the current (January 2) Journal of the American Medical Association.

If the name of the program is right, it's difficult to oppose it and avoid being labeled a "bad Guy," the editorial points out. Who, for instance, wants to oppose "The Drug Abuse Control Amendments of 1965?" To do so implies that one favors drug abuse. A closer look at the bill, however, reveals it is not concerned with drug "abuse," but with control and distribution of stimulant and depressant drugs.

"The floodgates have opened, and we may anticipate a deluge of dramatic titles which are capsulated value judgments rather than descriptive labels," says the editorial.

The following bills recently became law or are awaiting Presidential signature: "The Child Safety Act of 1966," "The Water Quality Act," and the "Economic Opportunity Act Amendments."

The newest catch title is "Preventicare," a newly proposed federal program for multiphasic health screening of all persons over 50 years of age.

"Now there, truly, is a press agent's dream (title)," the editorial said, "which will enlighten no one but will appeal to all who seek easy solutions."

Said the editorial:

"Physicians are not opposed to the constructive recommendations incorporated in many of these acts. Indeed, the American Medical Association has vigorously supported some of the bills cited. We believe, however, that prejudgment inhibits constructive debate. Neither sugar-coated titles nor the opposite strategy of scare campaigns serve the

populace well in the long run. Medical legislative titles presented to the Congress and to a mature public should be characterized by a forthright approach if medical problems of this decade are to be solved most effectively."

College Freshmen And Smoking

What effect does cigarette smoking have on the college freshman regarding his studies and health? To answer this question a study by Dorothy F. Dunn, Ph. D., of the University's Student Health Center Department of Health Science at the University of Illinois, Urbana, was conducted and financed by a grant from the AMA Education and Research Foundation.

The investigators found these startling facts when 3,567 freshmen at the University of Illinois were questioned about their smoking habits:

—There was an inverse association between grade average and smoking: of students with an "A" average, only 16.7 per cent smoked, while 59.1 per cent of "E" average (the lowest grade) students smoked.

—Sixty per cent of the freshmen did not smoke, and 43 per cent of those who smoked wanted to stop.

—The amount of allowance seemed to have a relationship to smoking. When parents provided full financial support, the number of freshmen who smoked was above average. The average weekly spending money was slightly over \$8. When it was more than \$5, the percentage of smokers was above average. Only 20 per cent of those who received sole financial support from a scholarship smoked.

—Of those who smoked 12 months ago, 56 per cent had increased the number of cigarettes smoked per day. More than 27 per cent

smoked a pack a day or more.

Eight out of ten freshmen believed students were adequately informed regarding the potential dangers of cigarettes, and nine in ten believed that the cigarette smoker had a greater chance of developing lung cancer than the nonsmoker.

The study also revealed that the majority of students may be more ready to tighten university smoking regulations than their elders on the Campus, Dr. Dunn said. She urged that colleges and universities reconsider their smoking regulations, and that they institute programs to take the social pressure to smoke off freshmen.

She further stated "How much longer can colleges and universities enjoy the status quo and collect revenue from campus cigarette sales knowing that smokers may pay later with years of disability or premature death? Freshmen who do not wish to smoke comprise a group toward which universities should focus effort in prevention."

How to Raise Money

Many doctors—surgeons especially—operate on the principle of charging the patient according to his ability to pay. Ophthalmic Surgeon Alston Callahan of Birmingham operates on his own version of the principle. A well-heeled patient gets no bill. Instead he is asked for a donation to the center in which he has been treated.

Dr. Callahan joined the eye section of the University of Alabama Hospitals soon after World War II. He also set up private practice. One of his first patients was the teen-age granddaughter of wealthy Shipbuilder Robert I. Ingalls. Dr. Callahan straightened the girl's crossed eyes, and on a hunch sent no bill. When Ingalls insisted on a settlement, Dr. Callahan told him that he would prefer some help toward starting a nonprofit

hospital for eye patients. "How much?" asked Ingalls suspiciously. "Mr. Ingalls," said the doctor with studied boldness, "you're not noted for being a generous giver."

After Ingalls stopped laughing, he picked up the phone and told his attorney to draw up incorporation papers for Eye Foundation, Inc., to which he eventually gave \$25,000. It took Dr. Callahan ten years to raise, by the same dollar-extraction technique, the rest of the \$1,500,000 that he needed to get the hospital opened and operating. Along the way, he called on Lumber Millionaire Alfred S. Mitchell to ask for a donation. Mitchell was also having trouble with his eyes. An on-the-spot examination revealed cataracts, which Dr. Callahan later removed. Again, no bill. Mitchell wound up giving \$25,000, and gifts from the foundation that administers the Mitchell estate have since raised the total to \$45,750.

Dr. Callahan does not claim that his donation approach is new, and medical folklore is full of tales about wealthy benefactors who have been tapped this way. Most stories turn out, on investigation, to be false, though Houston's famed heart surgeon, Michael E. DeBakey gets many donations this way.

Last week, as proof of patients' gratitude, Dr. Callahan had the promise of a new Mitchell Foundation gift of \$600,000. Two other foundations are meeting soon to consider additional grants. One is headed by John E. Meyer, who suffered an eye wound as a fighter pilot in World War II, and periodically goes to Dr. Callahan to have long-hidden metal fragments removed.

Eye surgeons, even more than heart surgeons, seem to have an emotional advantage in this type of fund-raising. Says Dr. Callahan: "A fellow can go to a doctor with a bellyache, get better, and say to himself, 'Hell, I might have gotten well anyway.' But with the eyes, you can't say that. If you have cataracts, you know that unless they're removed, you won't get well."

Reprinted from *Time*, Dec. 30, 1966.

PROGRAMS IN HEART DISEASE, CANCER AND STROKE: IMPLICATIONS FOR ALABAMA

by

Walter B. Frommeyer, Jr., M. D.*

For Alabama, the implications of the Programs in Heart Disease, Cancer and Stroke are both broad and deep. To the writer, these programs involving the killer diseases could represent the beginnings of a University without walls. This in no sense should be interpreted as domination of the programs in Heart Disease, Cancer and Stroke by the full-time faculty of the University of Alabama Medical Center in Birmingham. That such is not implied or intended is amply demonstrated by the composition of the Advisory Committee of the State of Alabama for the Programs in Heart Disease, Cancer and Stroke, which includes highly knowledgeable business leaders and practicing physicians from many areas of the State of Alabama and only a few members from the Medical Center in Birmingham. The term "University without walls" is used in its broadest sense to indicate on-going education of physicians, allied health personnel, and the citizens of the State of Alabama.

In the opinion of the writer, the State of Alabama probably has the best chance of making these programs in the killer diseases a successful reality of any State in the Union.

*From the Department of Medicine, University of Alabama School of Medicine, University of Alabama Medical Center, Birmingham, Alabama.

Supported by Grant No. CA 03013-11, National Cancer Institute, National Institutes of Health, United States Public Health Service, Cancer Chemotherapy National Service Center.

This seems to be so for several reasons. Of paramount importance is the fact that the State of Alabama is unique in that the Board of Health of the State of Alabama is the Medical Association of the State of Alabama. Similarly, each county Board of Health is the County Medical Society. This unification of the medical profession and the Board of Health in Alabama has proven to be a wise decision on the part of a far sighted man many years ago. Because of this unique situation, no rift exists between the Board of Health and the physician population of the State of Alabama such as exists in many of the other States of our Union.

Of no less importance is the excellent relationship which exists between the medical profession of the State of Alabama and the University of Alabama. Each holds the other in high regard and in trust. Together they have evolved and masterminded matters medical in our State. Under such conditions, the boundaries of our accomplishments seem unlimited.

Inherent in the successful operational phase of the Programs in Heart Disease, Cancer and Stroke, which now is only in the planning phase, are an informed, enthusiastic, and co-operative medical profession and the consumers of medical services, namely the citizens of the State of Alabama. Lacking either, these programs will be a dismal failure.

(Continued on Page 904)



when he just can't sleep

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Adverse Reactions: Idiosyncrasy, such as excitement,
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Dosage: 1½ to 3 grains at bedtime.

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(Continued from Page 901)

There must be an understanding, a working together, and a dedication on the part of the medical community and lay community to a degree we have never before attained. The members of the lay community must always remember that these programs do not represent a Carte Blanche for free medical care but that each patient has his own private physician and that the patient-physician relationship remains absolutely and unequivocally unchanged. Without strict adherence to the maintenance of the current physician-patient relationship, no medical program will long survive.

The hospital system and the care of our sick in Alabama are complex matters to which much time and thought has been given by the medical community of our State. The excellent hospital plan developed by the State Board of Health provides an excellent means for the "University without walls." From the small rural hospital and the large regional hospitals, a steady flow of information and superior patient care should be maintained. From the two-way flow of information emerges an educational umbrella covering all physicians and allied health personnel in every hamlet and community in Alabama. This is continuing education in the real sense of the word and is what I like to think of as "on the job" training. With the physician's patient commanding the center of the stage,

such an educational experience is without equal.

Under such a two-way street educational system, the excellence of patient care can only prosper. The writer anticipates that the skills of those of us rendering medical care to our people will be sharpened and increased. This will mean that even more and better care of our people will be available in the smallest hospitals in our State. This is precisely as it should be since the larger regional hospitals in the State could not possibly render all of the medical care to the citizens of Alabama because of lack of personnel and facilities, the undesirability of such a system from the point of view of the patient and the total non-necessity of such a system. There should be available to our patients those complex diagnostic and therapeutic procedures necessary for the restoration of the patient to a state of health. These procedures ideally should be available in the larger hospitals in several areas of the State.

Therefore, the implication for Alabama of the Programs in Heart Disease, Cancer and Stroke, could be the Golden Age of Medicine. An educational system unparalleled in our history could evolve. Through this educational system superior medical care can be rendered to the citizens of our State. For such operational programs to be successful, depends upon us, the physicians of the State of Alabama acting as the Board of Health of the State of Alabama.

WANTED: ASSOCIATE, General Surgeon or Surgeon Sub-specialist to join three Internists and Dermatologist in Practice located on Southeast Coast of Florida. No financial outlay required.

Further details on request. Please address all inquiries to Sidney Davidson, M. D., 601 South Federal, Lakeworth, Florida.



around the state

County Society Meetings

Bullock County

The Medical Society of Bullock County met on December 28, 1966 at the Bullock County Hospital with Dr. H. S. Banton, Jr., president, presiding. Four members attended.

New officers were elected and routine business conducted.

Clarke County

Dr. William F. DeShazo presided at the January meeting of the Medical Society of Clarke County at Grove Hill, Alabama. Eleven members were present.

Extensive discussion was held on the critical hospital situation in the Southern half of Clarke County. A review of the five hospital surveys made by the State Health Department relating to the hospital situation was held.

Colbert County

A business meeting was held by the Colbert County Medical Society in December. Dr. W. Williams, president, presided. Dr. Joseph A. Syslo was elected as a new member.

Crenshaw County

A business and social meeting was held by the Medical Society of DeKalb County at the DeKalb County Hospital. Dr. William Noble, president, presided. There were 10 members present. Officers for 1967 were elected.

DeKalb County

On Sunday, December 4, the DeKalb County Medical Society and the Medical Auxiliary sponsored a reception and tea honoring Dr. C. D. Killian "for 53 years service." The occasion was held at the First Baptist Church, Fort Payne, Alabama and was well attended by local and out of town guests and friends.

Lauderdale County

The December meeting of the Lauderdale County Medical Society was held at the Coffee Memorial Hospital with Dr. M. M. Dunn president, presiding.

Principal speaker was Dr. G. R. Melson of Florence. His topic was "Football Injuries."

Dr. Aubrey S. Miree, III, was elected a new member by a transfer from Jefferson County Medical Society.

Lee County

The Lee County Medical Society held its December meeting at the Saughatchee Country Club in Auburn with Dr. Kirven Brantley, vice president, presiding.

Dr. Harry Philpott, president of Auburn University, spoke on "Medicine and Education."

Dr. W. B. Turk, formerly of Evergreen, Alabama, was elected a new member.

Marion County

A business meeting was held by the Marion County Medical Society in December at Hamilton, Alabama. Dr. Edwin W. Couch, president, presided. New officers were elected for the coming year.

Pickens County

The Reform Hospital was the meeting place for the Pickens County Medical Society in December. Dr. R. K. Wilson, president, presided.

Dr. Walker B. Sorrell, pathologist from Montgomery, Alabama spoke on "Cross-Infections in Hospitals."

Randolph County

Dr. Carroll Sasser, chief of staff of the Randolph Hospital, presided over the December meeting of the Randolph County Medical Society. Seven members attended the meeting, which was concerned with routine business.

Tuscaloosa County

The Tuscaloosa County Medical Society met in December at the County Health Center with Dr. Sam Darden, president, presiding.

Principal speaker was Dr. Holt McDowell of Birmingham. His subject was "Long Term Results of Carotid Artery Surgery."

WANTED: INTERNIST, Board qualified or Board certified in Internal Medicine, Florida licensed, to be associated with a group of three internists. Salary and percentage basis the first year, with minimum guarantee of \$18,000. Located on Southeast coast of Florida. Future partnership assured.

Further details on request. Please address all inquiries to Sidney Davidson, M. D., 601 South Federal, Lakeworth, Florida.

ANNOUNCEMENT

The following were elected for Fellowships and Associateships in the American College of Physicians at the Credentials Committee Meeting which was held in Philadelphia, Pennsylvania on November 12, 1966.

FELLOWSHIP

Seaburt Goodman, M. D., Birmingham, Alabama

Robert A. Kreisburg, M. D., Birmingham, Alabama

Bayard S. Tynes, M. D., Birmingham, Alabama

ASSOCIATESHIP

Robert M. Combs, M. D., Selma, Alabama
James A. Davis, Jr., M. D., Birmingham, Alabama

Paul M. Goldfarb, M. D., Mobile, Alabama
William S. Moughon, M. D., Birmingham, Alabama

J. Walden Retan, M. D., Birmingham, Alabama



"Migaud triplets!"

Reprinted from **The New Physician**



Public Relations and Economics committee shown in action as they discuss their program of work are Dr. S. Buford Word, Dr. C. A. Grote, Jr., Chairman, Dr. Ira Patton and John Arnold, MASA staff.



Taking time out for a coffee break are left to right: Dr. Margaret Klapper, Dr. T. Lumpkin, Dr. W. A. Edwards and Dr. A. M. Freeman.



American Medical Association representative Whalen Strobhar was present for the Board of Trustees meeting, January 8. Here he is looking over the latest edition of the Alabama Medical Journal.



The AAGP board meeting had a fine session covering many topics. Dr. Jack Pilkington, Dr. T. Riley Lumpkin and Dr. John B. Rice are discussing their annual meeting when this photo was taken.



Dr. E. Bryce Robinson, Jr., President Elect and AMA delegate; Dr. James E. Brown, past president of AHA; Dr. Ira B. Patton; Dr. Henry G. Hodo, Jr.; and Dr. Winston A. Edwards show attentive interest on subjects relating to the Alabama Hospital Association.



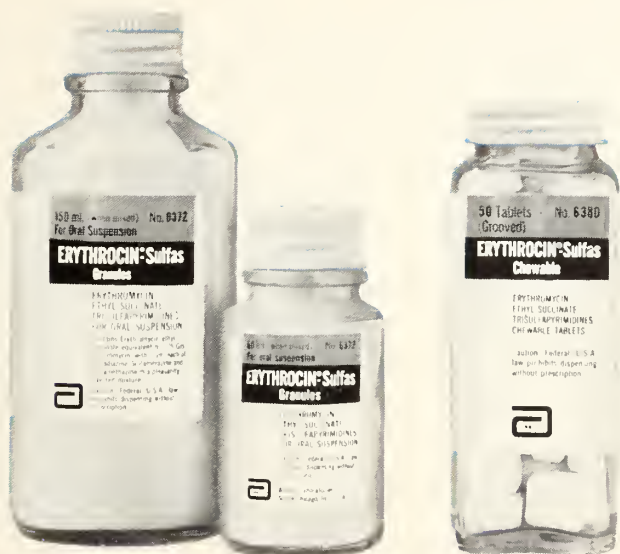
"Tell me Doctor . . ." Members of the AAGP recap some of the comments made in their committee meeting. They are (l to r) Dr. Carl A. Grote, Jr., Dr. W. C. Browne, and Dr. John Rice, President of AAGP.

(Continued on Page 911)



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.

ERYTHROCIN-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

A clinical cure rate of 97.7%



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



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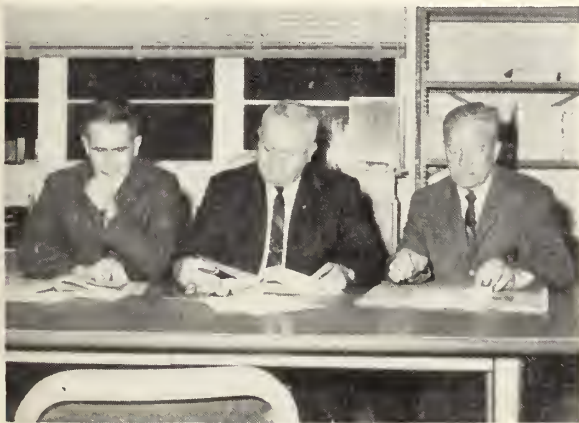
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Vice President F. M. Phillippi, Jr., Dr. Arthur F. Toole and Dr. M. Vaun Adams looking over the Board of Trustees committee reports that met January 8 at the MASA building.



The Medical Assistants Seminar Committee met January 8. Who's the lucky gentleman that met with these lovely ladies? Dr. H. V. Allen, Advisor for the Mobile Chapter, that's who.



Looking over the entries for the Douglas L. Cannon, William Henry Sanders and William Crawford Gorgas Awards are (l to r) Dr. Ira B. Patton, Colin (Buster) Macquire, Montgomery Advertiser City Editor and Dr. S. Buford Word.



Dr. William L. Smith and Dr. Paul Mertins checking the financial status report of MASA.



Board of Trustees in action at the January 8 monthly meeting. Left to right MASA Executive Director L. P. Patterson, staff member Anita Wade, Dr. E. Bryce Robinson, Jr., Dr. M. Vaun Adams, Dr. H. G. Hodo, Jr., and Dr. Paul S. Mertins, Jr.



Looking at the Board of Trustees from another angle left to right around the table are Dr. H. G. Hodo, Jr., Dr. Paul S. Mertins, Jr., Dr. James E. Cameron, Dr. Samuel J. Campbell, Dr. E. F. Porch, Dr. A. F. Toole, Dr. John D. Peake, and Dr. William L. Smith.

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"I wish I had your way with the nurses, Frankie."

Reprinted from **The New Physician**



Let's get
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about
diuretics

With Hygroton, you'll discover that you can almost always use fewer tablets than is possible with other diuretics.

You may be told that a new short-acting diuretic was found more effective than Hygroton in congestive heart failure—but this was when twice the manufacturer's maximum recommended dose was given.* At the maximum recommended dose for both diuretics, two tablets of Hygroton were far and away more effective than five tablets of the other diuretic in producing natruresis and weight loss. And at these dosages, Hygroton costs only $\frac{1}{3}$ as much as the other diuretic.

Since the discovery of chlorothiazide, the trend has been away from short-acting, multiple-dose, high-cost diuretics. With Hygroton you can usually do the job with just one tablet a day, or every other day.

More than any of the newer diuretics, Hygroton brings dosage and cost of medication down to earth.

*Brest, A. N., et al.: J. New Drugs 5:329, 1965.

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Indications: Hypertension and many types of edema involving retention of salt and water. **Contraindications:** Hypersensitivity and most cases of severe renal or hepatic disease. **Warning:** With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind. **Precautions:** Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. **Side Effects:** Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration. **Average Dosage:** One tablet (100 mg.) with breakfast daily or every other day. **Availability:** Tablets of 100 mg. in bottles of 100 and 1000. For full details, see the complete prescribing information. 6524-V(B)

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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. Further information is available from the central office, 19 South Jackson Street, Montgomery, Alabama 36104—or Phone 263-6441.

LOCATIONS WANTED

Ob-Gyn—Age 33, married; Univ. of Cinc.; Military oblig. completed; Available July 1967.

LW-62

Pediatrics-Allergy—Age 32, married; Cornell 1961; Board eligible; military oblig. completed. Available July 1967.

LW-63

Ob-Gyn—Age 35, married; Med. Col. of S. Carolina 1962; Board eligible; military oblig. completed. Available July 1967.

LW-64

GP—Age 43; married; Bowman Gray Sch. of Med. 1952; completing military duty March 1967.

LW-65

Ob-Gyn—Age 32, married; Loyola Med. Col.; Board eligible; completing military duty July 1967.

LW-66

Gen. Surg.—Age 33, married; S.U.N.Y. Col. of Med.; military obligation completed; Available July 1967.

LW-67

GP—Age 34, married; Univ. of Ark.; Military oblig. completed; Available now.

LW-68

Int. Med. & Gastroenterology—Age 30; Emory Univ. 1961; Military oblig. completed; Available now.

LW-69

Public Health or Administration—Age 46, married; Med. Col. of S. Carolina 1943; Certified Am. Boards; completing military duty; available now.

LW-70

GP—Univ. of Ky 1966; Military oblig. completed; Available July 1967 after internship.

LW-71

Anesthesiologist—Age 41, married; Syracuse Med. School 1956; military obligation completed; Available now.

LW-72

PHYSICIANS WANTED

GP needed for small town in Franklin County, near Tenn. Valley waterways; population 2,000 with large trade area; exc. schools, churches, soc. life.

PW-38

Town in n. central Ala., 1300 pop. seeking gp. Two hospitals only nine miles distant; membership open; nice clinic owned by city.

PW-39

GP and surgeon needed for town in Franklin County to be associated with established surgeon in four-man clinic. Fully accredited hospital; pop. 7,500 with trade area near 25,000.

PW-40

Physician needed for regular 8-hour day in salaried position. Age no factor.

PW-41

Industrial position open for GP-ObGyn; office fully furnished; no capital nec.; substantial salary; some night calls; age no factor.

PW-42

Town in Shelby County in need of phys. services; new medical clinic; 12-18 mo. rent free; option to buy or rent clinic. Pop. 2,000; only 8 miles from large lake area.

PW-43

Town of 1200 pop. in Bibb County seeking GP. New 27-bed hospital with open membership on staff. Many small industries; farming and cattle area. Educational advantages available.

PW-44

Internist needed for well-established family practice with pediatrics but excluding OB. Seeking associate, but not necessarily board qualified. Salary basis for one year with full partnership opportunity.

PW-45

GP-Internist for S. Ala. town of 10,000. On interstate between Mobile and Pensacola; new hospital just opened; near Gulf Coast.

PW-46

GP—wanted for town of 2,000 combined with nearby town of 1,000. Trade area over 8,000. Truck farming, timber and fruit industries. Excellent schools, churches and rent-free clinic. Hospitals 9 mi.

PW-47

A BILLION DOLLARS WORTH OF GULLIBILITY

As long as there are human beings there will be human nature . . . and shysters to take advantage of the fact.

Each year our gullibility to health frauds costs us an estimated billion dollars. Furthermore, the gimmicks, devices, formulas and fads of quacks accumulate faster than they can be caught in the spotlight of notoriety by government agencies, medicine and volunteer health organizations.

Indeed, quackery has become so commonplace that some forms have gained general acceptance. And no wonder. Quacks have been refining their technique since the beginning of time.

One of the earliest known prescriptions was a hair grower, compounded especially for Queen Ses of Egypt in about 3400 B. C. It consisted of dog toes, date refuse and asses' hoofs. This concoction had the same effect as present-day hair restorers—none.

No one can claim immunity from a quack. At one time or another science itself has fallen victim to hucksterism. But when the mechanics of quackery are understood, the often-dangerous, always-expensive merchants of deceit can usually be avoided.

Quackery is perpetrated in many ways—lectures, books, mail-order circulars, and is even peddled house-to-house. Its forms are as varied as unscrupulous but fertile imaginations can make them.

Perhaps one of the best clues to spotting a quack comes from an understanding of the history of the word. Quack, as it is used today, is an abbreviation for the earlier form quacksalver. Using the cry of the duck to denote ignorant chatter and boasting, the word "salver"—to save or heal—was added. Thus quacksalver came to mean one who

makes noisy pretensions to a medical skill for profit and prestige.

Nutrition—what we eat or don't eat—has become the most lucrative field for the quack. Annually Americans fall victim to \$500,000,000 worth of dietary nonsense in form of "health" foods, food supplements, weight-reducing gimmicks and literature, fads and cults. This is more than the American public spends on medical education each year.

Nearly another half-billion goes for self-medication of self-diagnosed ailments.

There is probably a nostrum for every symptom, whether real or imagined. Yet, with a few notable exceptions, tonics, elixirs, potions and pills available without prescription have little or no medical value. On the other hand, some do have the ability to mask symptoms of serious conditions that ought to be called to a physician's attention.

For most people, an occasional meal of kelp or dose of pep tonic is not an overt menace to their health—no matter how much it belabors common sense and pocket book.

It is a different matter when a person is seriously ill. Then the ministrations of a huckster can steal life itself. For while the quack plies his "miracles," the victim is lured away from the very help he so desperately seeks.

A cancer victim doses himself with sea water, purchased from a "specialist" at three dollars a pint, and wastes that precious margin of time when surgery or radiation might have saved him. Another man comes down with peritonitis while a "wave machine" with less energy output than an ancient crystal set, directs "harmonics" at the ulcer in his stomach.

Such practices go beyond the nonsensical. They become vicious schemes, often tantamount to murder.

In an effort to expose such abuses, along with medical cultism, health frauds and drug

A Science Feature Article prepared by the Communications Division, American Medical Association.

and nutritional absurdities, the American Medical Association and the Food and Drug Administration conducted two national conferences on medical quackery in Washington, D. C., in 1961 and 1963.

Why in a country as well educated as America is such a conference necessary? . . . Why would a woman give up insulin and face death in the belief that she had cured her diabetes by taking a five dollar bottle of dirty water infused with broomstraw? Why would a man crippled by arthritis pay by the hour to sit in an abandoned uranium mine?

Part of the answer to all this is the understandable resentment against dependency on a drug. Life sustained only by the ingredients of a hypodermic needle lacks a certain comfort and assurance craved by beings.

Another part of the answer came from a former athlete whose promising baseball career was ended by agonizing, incurable rheumatoid arthritis. He told a Senate committee investigating quackery: "I can guarantee you that when you are on a bed of pain you will try almost anything." He certainly had, including "miracle" foods such as alfalfa tea and seaweed, and "miracle" gadgets, such as vibrators. The results: absolutely nothing. The cost: \$3,000.

The sweet talk of a charlatan, the promise of a miracle after medicine has honestly admitted it can do little or nothing, can't help but be alluring to a desperately ill person. And, when there is "documentary proof of cures," the offerings of a quack can be overpowering.

Quacks invariably have reams of testimonials from those who have been "saved." Many of these, of course, are varnished lies. Others are the actual convictions of patients in the hands of quacks.

Medicine is well aware of the fact that a patient's feelings often have nothing to do with reality. At least one-third of all symptoms described to physicians are figments of the patient's imagination. And just as disease can be imagined, so can cures be imagined.

Research has shown time and time again that an injection of sterile saltwater or the swallowing of a sugar pill will ease pain as readily as a drug in some people. Because they believe they have taken a pain-killer, they imagine they feel relief.

So, when the fears and tensions of a cancer victim are eased by the promise he is getting better, then he well may feel better for a time—long enough at least to sign a testimonial for a quack.

Ironically, our modern age has given quackery a big boost. True, the market for wolf milk elixirs smuggled from the sacred tombs of ancient Egypt wouldn't be as great today as it was a century ago. But dolled up in new finery of scientific jargon, the same old "cure anything" pitch of the Eighteenth Century hawker gets wide acceptance.

The wonders of electronics, the atomic age and the legitimate break-throughs in medicine have impressed the public that science can do astounding things with some mighty strange materials. Mold is refined into penicillin; radiation, with its clinging aura of mystery, destroys cancer; high-pitched sound waves perform delicate ear surgery.

People today are generally aware of these developments. And it is from a launching pad of such fantastic reality that the quack skyrockets his fantastic deceit.

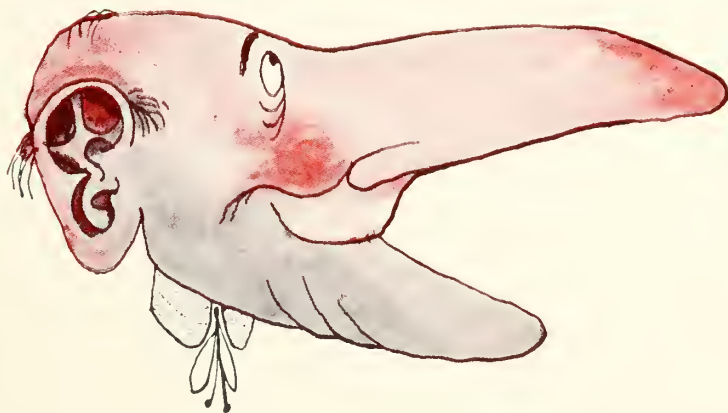
He capsules dirt, calls it uranium, and claims it will cure fifty diseases his forebears in the art of fakery never heard of. He devises a machine that produces a mysterious new "force," unknown to science but capable of righting any ailment. He uncovers the "natural" law of life and guarantees you'll live a century and a half if only you'll purchase his nostrums, eat his food, and live at his clinic.

Even taking into account the persuasiveness of the quack—his stock in trade—and the susceptibility of people overly concerned with their health, the limits of human gullibility defy understanding. It can only be

(Continued on Page 925)

for noses of every description,
one safe and sure prescription:

Otrivin®
(xylometazoline CIBA)
on Rx only



- quickly relieves congested nose
- action is gentle, yet prolonged
- side effects are minimal

INDICATION: Nasal congestion. CONTRAINDICATION: Do not use in patients sensitive to small doses of sympathomimetic substances. WARNINGS: Prolonged or excessive use may cause rebound congestion. Use cautiously in patients with hyperthyroidism, coronary artery disease, hypertension, and diabetes. CAUTION: Do not shake Nasal Spray. Rinse Nasal Solution dropper or Nasal Spray tip in hot water after each use. No more than one person should use the same dropper bottle or nasal spray.

SIDE EFFECTS: Occasional local reactions: rebound congestion, slight burning or stinging, sneezing, dry nose. Occasional systemic effects: headache, drowsiness, lightheadedness, insomnia, palpitation. Overdosage in young children may produce profound sedation. DOSE: Adults: Nasal Solution—2 or 3 drops in each nostril every 4 to 6 hours. Nasal Spray—Squeeze rapidly once or twice in each nostril every 4 to 6 hours. Children under 12: Pediatric Nasal Solution—2 or 3 drops in each nostril every 4 to 6 hours. One drop should be used

in infants under 6 months. Pediatric Nasal Spray—Squeeze rapidly once in each nostril holding tube upright; repeat every 4 hours as necessary. SUPPLIED: OTRIVIN® hydrochloride (xylometazoline hydrochloride CIBA) Nasal Solution, 0.1%; dropper bottles of 1 fluidounce, bottles of 1 pint. Nasal Spray, 0.1%; plastic squeeze tubes of 15 ml. Pediatric Nasal Solution, 0.05%; dropper bottles of 1 fluidounce. Pediatric Nasal Spray, 0.05%; plastic squeeze tubes of 15 ml. Nasal Solutions contain either 0.1% or 0.05% xylometazoline hydrochloride, triethanolamine, hydrochloric acid, sodium chloride, and phenylmercuric acetate 1:50,000 as preservative in water. Nasal Sprays contain either 0.1% or 0.05% xylometazoline hydrochloride, potassium phosphate monobasic, potassium chloride, sodium phosphate dibasic, sodium chloride, and benzalkonium chloride 1:5000 as preservative in water. Consult complete literature before prescribing. CIBA Pharmaceutical Company, Summit, N. J.

C I B A

**It's easy
for children
to get bacteria
U.R.I....**



and Gantanol (sulfamethoxazole) Suspension is a good way to help them get well

Proven effectiveness in common bacterial upper respiratory infections

clinical results in patients probably much like those you see every day show that an overwhelming majority responded favorably to Gantanol (sulfamethoxazole) Suspension.¹⁻¹² These patients, numbering over 1600 in published reports, had a variety of bacterial upper respiratory infections such as otitis media, sinusitis, pharyngitis and tonsillitis, including over 700 cases caused by beta-hemolytic streptococci.¹⁻⁷

Although in bacteriologically proven streptococcal infections penicillin remains the drug of choice, Gantanol (sulfamethoxazole) has conversion rates comparable to those generally seen with penicillin and apparently superior to those cited in the literature for erythromycin and broad-spectrum antibiotics.¹⁻² Conversion rates ranged from a high of 96 per cent in 229 patients² to a low of 5 per cent in 105 cases.^{3,4} When Gantanol (sulfamethoxazole) Suspension is used in group A beta-hemolytic streptococcal infections, it is important to continue therapy in the recommended dosage for at least 10 days. In addition, Gantanol (sulfamethoxazole) Suspension has demonstrated antibacterial activity against *D. pneumoniae*, *H. influenzae* and *Staph. aureus*. Thus Gantanol (sulfamethoxazole) Suspension may be considered a practical choice for common bacterial U.R.I., as well as an effective alternative in the penicillin-sensitive patient with proven beta-hemolytic streptococcal infection.

beta-hemolytic strep

Staph. aureus

D. pneumoniae

H. influenzae



therapy generally uncomplicated by side effects

Such favorable results as those cited in the literature¹⁻¹² are even more meaningful in view of the fact that only 27 of 1961 patients (1.4%) discontinued therapy because of side effects. Of the total side effects reported in 107 patients (5.5%), most were mild and included rash, urticaria, itching, dizziness, headache, diarrhea, nausea and vomiting, shivering sensation, skin discoloration and crystalluria.¹⁻¹²

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute and chronic respiratory and urinary tract bacterial infections due to susceptible microorganisms. At present penicillin is considered the drug of choice in acute group A beta-hemolytic streptococcal infections; however, Gantanol (sulfamethoxazole) has shown an effectiveness approaching that of penicillin in a large number of patients. If employed in such infections, it is important that therapy be continued in the usual recommended dosage for a period of at least 10 days.

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants or infants during first 3 months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed. Data insufficient on prolonged or recurrent therapy in chronic renal diseases of children.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Following may occur: headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Dosage: Children—1 teasp./20 lbs initially, followed by ½ teasp./20 lbs b.i.d. Adults—4 teasp. initially, followed by 2 teasp. b.i.d. or t.i.d., depending upon severity of infection.

How Supplied: Suspension 10%, 0.5 Gm sulfamethoxazole/5 cc teasp., cherry-flavored, bottles of 16 oz.

References: 1. Braden, B., and Colmore, J. P.: *J. Oklahoma M.A.*, 57:7, 1964. 2. Alban, J.: *Am. J. Dis. Child.*, 109:304, 1965. 3. Reichelderfer, T. E.: *Clin. Med.*, 71:1045, 1964. 4. Jackson, H.; Cooper, J.; Mellinger, W. J., and Olsen, A. R.: *Southwestern Med.*, 44:246, 1963. 5. Braden, B.; Colmore, J. P., and Cummings, M. M.: *Antimicrobial Agents Annual*—1960, p. 54. 6. Peters, J. H.: Data adapted from a Scientific Exhibit presented at the Spring Meeting of the American Academy of Pediatrics, April 26-29, 1965. 7. Peters, J. H.: *Antimicrobial Agents and Chemotherapy*—1961, p. 406. 8. Elia, J. C.: *Eye Ear Nose & Throat Month.*, 41:722, 1962. 9. Patton, J. M.: *West. Med.*, 5:46, 1964. 10. Chastain, P. J.: *J. Florida M.A.*, 48:816, 1962. 11. Grater, W. C.: *Antibiotics & Chemother.*, 12:450, 1962. 12. Exline, A. L.: *Colorado GP*, 5:(5), 11, 1963.

Gantanol®
(sulfamethoxazole)
Suspension

Roche Laboratories
Division of Hoffmann-La Roche Inc.
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Blood-glucose screening for all your patients?

...because "Abnormalities of glucose metabolism are among the [most common] encountered in clinical practice..."* Simple, quick, economical blood-glucose screening with DEXTROSTIX® Reagent Strips is practicable in every regular physical examination, emergency situation, and whenever hypo- or hyperglycemia may be of clinical significance — for "The precision and accuracy of DEXTROSTIX ...meet the need for an always available simple screening method..."* All that is required for screening with DEXTROSTIX is 60 seconds and a globular drop of capillary or venous blood. Abnormal readings will be a valuable aid to diagnosis; normals will help you establish an important baseline for future reference.

Marks, V., and Dawson, A.:
Brit. M. J. 1:293, 1965.

DEXTROSTIX—
provides a clinically useful determination when performed according to directions†

†DEXTROSTIX is not intended to replace the more precise analytical laboratory methods.



Yes—all your patients

AMES COMPANY, INC.
Elkhart, Indiana



A BILLION DOLLARS WORTH OF GULLIBILITY

(Continued from Page 920)

gauged by the outrageousness to which people have fallen victim.

Until caught by postal inspectors, a five-foot-two mail-order slicker reaped a rich harvest with a device he advertised would make short people taller. It stretched them on a rack something like those used in medieval dungeons.

Another man sold electric blankets as a cure for cancer. He charged \$185 each, and when his victims died, he repurchased the blankets from the bereaved kin for \$5 or \$10. These he resold to other cancer victims at the "new" price.

One quack even convinced some cancer patients they should inhale bacteriophage—the same type of germs found in sewage, intestinal tracts and pus. These, he claimed, would destroy the organism that caused cancer, and would cure many other diseases.

Medicine, unfortunately, is particularly vulnerable to shysterism. For one thing, everyone is at least somewhat aware of his health and hopes to keep it. For another, medicine is not an exact science. Its understanding is not complete nor does it have a specific answer for every ailment. Within these gaps the quack operates.

If, for instance, we had a cure for arthritis, quacks would have to vacate the field. There no longer would be room for phonyism. This, by the way, would save victims of arthritis \$250,000,000 annually—the amount now spent on misrepresented cures.

In addition to a wealth of victims, the quack also finds a high degree of immunity from the law by hewing close to the line of medicine. When science can't say what causes or cures a disease, then it becomes extremely difficult to prove the fraud of a quack's treatment—especially when it is all made to sound so plausible and when thoroughly conned victims will testify as to their "cures."

Years were spent by government investigators and prosecutors before they succeeded

in closing Hoxsey cancer clinics. Yet the "Hoxsey method" never did have any sound scientific basis. The Hoxsey "wonder drug," in fact, may have stimulated rather than cured cancer, according to a pronouncement of government scientists.

The legal battle against others reaping fortunes from unproven panaceas for incurable diseases have not been so successful.

In 1919 a highly educated man—a physician, professor and chemist—claimed to have discovered a substance he named "glyoxylide." Just one injection of glyoxylide, he said, would impart such a glow of health that the body would manufacture its own remedies against disease, including leprosy, cancer and tuberculosis, which at that time would not respond to drugs.

Twice he was brought to trial; twice expert chemists testified that glyoxylide couldn't be distinguished from distilled water, and twice he was set free. Jurors couldn't decide from the reams of testimony what was science and what was soothsaying.

Not that you can blame juries. The "truth" about glyoxylide became so befuddled that its "benefits" can be found enumerated in such an influential tome as the *Congressional Record*.

Finally, in 1953, a federal court upheld an order by the Federal Trade Commission obliging him to cease his false advertising.

The dupes of quacks can't be segregated by economic conditions, education or any other category. Quacks have taken in physicians and medical editors as well as housewives and world renowned personalities.

Elder statesmen and royalty have been among those trooping to the clinic doors of a Swiss physician who imparts longevity with injections of mashed cells from the unborn offspring of freshly slaughtered sheep.

Just why such injections should prevent aging, the good doctor has never found time to explain to the rest of us. At any rate, while his technique might be new, his concept isn't.

Back in the Twenties a Kansas "doctor" was "rejuvenating" old men by giving them

transplants of goat gonads. He'd probably still be doing it, except he was run out of the country, together with his yachts, four automobiles and airplane. Besides, he discovered that hawking a mixture of blue dye and hydrochloric acid was just as lucrative and easier besides. It didn't entail the mess of an operation.

More alarming than the individuals among the quacks, however, are the whole "professions" that have sprung up in the shadow of medicine.

Anyone can set up an alleged health clinic. Truck drivers, insurance salesmen and even ex-convicts have been found running them.

Nor is "private practice" out of reach of the determined. A "college" diploma for wall display can be had in naturopathy or chiropractic whether you've graduated from high school or not. One such school even offers the inducement of a class "buddy" of the opposite sex to help you through your studies.

The tragedy of all this is exemplified by a murder case that was tried in the California courts involving a chiropractor who sought to cure an eight-year-old girl of cancer through muscular manipulations, enemas and vitamin pills. The death of this girl probably was premature. The parents of the girl testified in court they had been persuaded to take their daughter out of a hospital where surgery had been scheduled which would have prolonged—and might have saved—her life.

Whether a schooled scientist with a quirk in his nature or a door-to-door salesman peddling "nature's remedy," quacks have much in common.

The Department of Investigation of the American Medical Association—a clearing house for information about quacks and their methods for more than 50 years—lists six simple rules in spotting one.

—If he uses a special or "secret" formula or machine that he claims can cure diseases.

—If he promises a quick or easy cure.

—If he advertises, using "case histories" or testimonials to impress people.

—If he clamors constantly for medical investigation and recognition.

—If he claims medical men are persecuting him or that they are afraid of his competition.

—If he tells you that his method of treatment is better than surgery, x-rays or drugs.

In addition, the quack often wants payment in advance, for he'll tell you the expense of miracles comes high. In the "interest of humanity," however, he's open to bargain, and will "sell below cost" a charm bracelet of "exotic" metals, that relieves pain, or an electronic gadget that looks like a horse collar and is supposed to magnetize the iron in the blood, thus curing all ills.

The phenomena of the quack in the healthiest nation on earth is indeed difficult to comprehend. We're not the only pushovers in the world, it's true, but we do spend the most at it.

The real wonder is that our health is so good, considering the quack abuses we can inflict on ourselves. But even more to the point, our health would rise in inverse proportion to the decline of self-diagnosis and self-medication.

At the same time, the nation's bill for health care would be noticeably reduced if Americans would stop squandering millions of dollars on medical and nutritional hokum.

Good health can't be found in a salesman's bag or a pitchman's persuasions.

Nor is it expensive, until something goes drastically wrong.

It requires only good eating habits, but not overeating; sufficient exercise, but sufficient rest too, and enough indulgence to give life its zing, but without falling addict to abuses.

THE CHANGING CONCEPTS OF MENTAL HEALTH CARE

Annually Americans, through local, state and federal governments, spend about three billion dollars in support of mental health care.

Most of this money goes to maintain a population nearly the size of Detroit's in mental hospitals. Yet many mental patients don't belong in such institutions.

According to modern psychiatric thought, they belong in their own community—at home—not miles away.

"Institutional care may have seemed the only solution at one time, but we know now that it can be more of a detriment than a help," said Hamilton C. Ford, M. D., of the American Medical Association's Council on Mental Health.

"There has been a revolution in the treatment of the mentally ill in the past decade and this in turn has revolutionized our way of looking at mental illness.

"In the language of this missile age, it's time to start phasing out many of our centralized mental hospitals, just as these hospitals phased out the ancient concept of insane asylums not so many years ago."

Just as emphatic is Robert H. Felix, M. D., dean of St. Louis University School of Medicine and former director of the National Institute of Mental Health at Bethesda, Md.

"Based on what we have learned," he declared, "the concept of a large mental hospital as the most desirable place for a sick mind seems rather ridiculous.

"There is no valid reason why mental illness cannot be treated like any other illness—in a doctor's office or a local hospital if necessary."

There are years of precedent against such a stand, but apparently precedent is going

to have to stand aside if we're to make inroads against the growing problem of mental illness.

The first true mental hospital in this country was built before the Revolution at Williamsburg, Va. It wasn't for another hundred years, however, that states took over full responsibility for mental illness and centralized hospitals came into being.

Sheer size ultimately proved to be no answer, and in recent years the trend has been toward smaller, although still somewhat centralized, state hospitals.

The new accentuation goes still further, and aims at decentralization on a grand scale. The idea is to put mental health squarely up to the individual communities under high quality state standards.

Only in this way, mental health planners feel, can truly effective programs be worked out and the whole spectrum of problems ranging from those of the anxiety-wrought housewife to those of the criminally insane, be fully met.

Several states have already passed legislation designed to stimulate comprehensive community health centers, and legislation is pending in others. In these communities where it has been tried, results are extremely gratifying.

In fact, after a five-year study of the results, the Council on Mental Health in 1962 urged nationwide application of the concept.

A start toward working out the intricacies of such a vast undertaking came a year later with Congressional approval of federal matching grants for community centers.

The crux of the problem is how to get medical care for mental illness essentially on the same footing as traditional medical care. This may sound simple and uninvolved, but is not, for it represents a radical departure from the past.

(Continued on Page 930)

A Science Feature Article prepared by the Communications Division, American Medical Association.



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
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CHANGING CONCEPTS OF MENTAL HEALTH CARE

(Continued from Page 927)

"Since medieval times the idea has been to segregate the mentally ill," explained Dr. Ford. "Perhaps this was often all that was possible when the average stay in an institution was 30 years. It is not true today when a period of weeks is often the rule.

"You can't look at psychiatry as a plug-along affair anymore. Drugs—an array of sedatives, hypnotics, tranquilizers and stimulants—new hospital techniques, out patient services, group therapy and many other factors have given psychiatry the momentum of atomic physics."

The impact of all this on mental health and mental institutions is startling. At Worcester State Hospital in Massachusetts, the application of the new forms of treatment decreased the patient population nearly 40 per cent in five years and closed down ten wards.

But if the technique works so well in large institutions, why shift the base of mental health care to the community?

To Dr. Felix the answer is obvious. The patient does even better in his own community. "Each of us lives in a community, or more to the point, in a neighborhood," he explained. "When, for psychiatric reasons, we can't quite make it among our neighbors anymore, we've got to get help.

"Now, when a person needs help, that is not the time to wrench him from his family, his friends, all that is familiar to him, and deliver him to an institution. The first thing he has to do in an institution is to get readjusted, and this can impose a severe jolt when he doesn't even see many normal people, except for the staff, and sometimes is too far from home to get visitors regularly.

"What the mental patient needs as much as drugs and techniques is a good therapeutic environment. Some of our better institutions literally spend millions creating a home-like

atmosphere. But nothing can be more home-like than your own neighborhood and friends.

"Also, you have to consider that he got sick in his own neighborhood, when he gets out he has to go back there, so he ought to be treated there. Otherwise, he may come to the conclusion that the only thing to do is run away. Going to an institution is running away, in a sense.

"That's why I say it is ridiculous to think that institutionalization is the best way to make people well. It may work, but it's the long dark way to recovery."

Big institutions have certain other inherent defects, Dr. Felix believes. Too many people who need help and know it, will shy away for fear "of being sent away." Then too it's often a case of the "big institution over the hill" being out of sight, out of mind.

Their isolation—and they can be isolated in a city as well as in the country—and the fact that patients are congregated there from such a wide territory, has the public looking at many mental institutions "more like an industrial complex than a hospital," Dr. Felix said. This breeds public apathy and lack of support.

Not only does the hospital get lost in the public mind, the patient sometimes gets "lost" within the big hospital. "The involved mechanism needed to run a big institution often prevents an individual from getting the personalized care he needs so desperately," Dr. Felix said. "It might take months to get him into the proper line of treatment, and these are the early months so very important to his recovery.

"In contrast, the principal objective of the whole new program is to make seeking help for mental illness as simple and uncomplicated as getting medical attention for a tummy ache."

Working at the community level, care can be quick and intensive. The waiting lines, the procedural complications that often bog down so many mental hospitals are minimal.

To get help a person would have to look no further than his family physician. Many emo-

tional and mental problems can be resolved right there. Those patients who do need special attention would be referred to a psychiatrist, just as the family doctor now will often call in a surgeon to remove a diseased gall bladder.

If hospitalization is required, then the patient would be admitted to his local hospital or mental health center. This could involve either full or part-time care. After discharge, or perhaps as the only care necessary, the patient might be seen in a community outpatient facility.

No matter what the course of treatment, the aim is to interrupt the patient's day-to-day life as little as possible. In some cases hospitalized patients might even continue to work, the only difference being that they would leave for the office from the hospital and return there at night.

There is almost unanimous agreement among psychiatrists that working through the family doctor offers a tremendous advantage in the care of the mentally ill.

"No reason exists why any physician can't treat mental illness just as well as any other common ailment," Dr. Felix said. "And, when the same man who has treated a patient for other ailments in the past treats him for a mental disorder, the patient comes to realize there is nothing strange or bizarre about mental illness. There's not all the brow-beating that some patients heap on themselves."

Also, no one is in a better position to spot early signs of emotional disturbances than the family doctor. He sees it often enough in his normal work—patients with symptoms but no apparent organic causes of disease.

Even when a patient is referred to more specialized care, it is often extremely helpful if the family doctor acts as a buffer for the patient and follows through the treatment.

That most physicians cannot play this role at present is due in part to the fact that mental health care has been oriented away from him. There are few accessible facilities where he can see his mental patients, and

practically none for testing or followup services.

Neither can most physicians be on the staff of state hospitals, if for no other reason than it's often too far away.

Nearly all physicians do, however, belong to the staff of the local hospital and there he could see his mental as well as other patients—if the hospital has mental health facilities. These are generally lacking.

To provide the needed beds, the room for new therapy centers and the space for allied services, lawmakers have enacted legislation to spur the building of mental health centers. Under this program, local, state and federal money is pooled to make possible expansion of existing hospitals or the construction of new ones.

On the surface this sounds like a pretty tall order, for today as many hospital beds are devoted to mental illness as all other illnesses combined.

We're not, however, going to have to double bed space in our general hospitals—not if modern psychiatric care can be put on a firm footing at the community level. In fact, the bed-space needs of psychiatry can probably be reduced, for with good care many mental illnesses can be treated better out of the hospital than in.

Studies at many institutions have demonstrated this. A group of psychotics treated as out-patients at Manhattan Hospital were away from their jobs only six weeks. A similar group who were institutionalized, spent six months in the hospital and had to recuperate at home after they were released.

At the Metropolitan State Hospital, Norwalk, Calif., another study showed that even severely ill schizophrenic patients could, after a period of hospitalization, be well cared for out of the hospital with as little as 20 to 30 minutes of individual psychotherapy once a month. It was also found that some of the treatment could be handled by non-professional personnel, called psychiatric aids, who worked under the direction of a psychiatrist.

Another reason why we don't need to double bed space in local hospitals is that no-

body is considering scrapping the entire network of state hospitals.

For one thing, some people have been in mental institutions so long they cannot be brought out.

For another, the centralized institution still has an important role to play. The emphasis, however, is changing. Instead of trying to be all things to all types of mental patients, institutions are becoming more specialized treatment centers—just as we now have special hospitals for eye and ear ailments, children's diseases, etc. In other words, people will not be put there so they can be controlled. They'll be put there because they need the special kind of treatment that can be offered—group therapy or long term rehabilitation, for instance.

Hospital beds and centers are not all that's needed. To make a go of community mental health care we also need agencies and facilities to handle special problems such as children, the senile and alcoholics. We're going to need rehabilitation facilities, foster homes, emergency services for such things as suicide prevention, visiting services for people at home and homemaker help for women who need it.

Nevertheless, says Dr. Felix, all of this can be phased in with ultimate savings of many millions annually.

"With the kind of energized treatment that would become possible, we're not going to have the chronic problem of where to store people who won't respond because we didn't get to them fast enough.

"We're going to be better able to take advantage of existing volunteer and public supported services, and we're going to have more people who can pay for mental treatment through private means and not rely on the state.

"You can see this effect already in medical insurance. A few years ago insurance companies couldn't afford to cover mental illness because treatment was so drawn out. Today several big companies cover mental

illness like any other, and more will follow suit.

"Insurance in itself will eventually be a tremendous help, because when a man is covered by insurance he is not afraid to seek early help when he needs less care. Indeed, the freedom from worry over possible financial catastrophe if he becomes mentally ill, can help relieve a man's mental pressures."

Although the impact of modern psychiatric thought is well on the way to shaking the foundations of mental health care in this country, the basis for this "new" wave of thinking is far from new.

In surprisingly modern language, the founders of the Pennsylvania Hospital (including Benjamin Franklin) expressed the belief that mental illness should be treated in the community and should be a part of the care offered by a general hospital.

This hospital, the first in the United States, was chartered at Philadelphia in 1753, nearly 20 years before the first mental hospital at Williamsburg.

During later decades, however, this policy got little more than lip service at other than a few enlightened hospitals, and the generally deplorable treatment of the mentally ill led to the reforms and centralization of the nineteenth century.

Despite good intentions, centralization too produced its faults, principally unwieldiness and de-personalized treatment. And, with the modern tools of psychiatry, the central hospital lost many of what advantages it did offer.

"I can't think of one category of patients that does better in a centralized institution," says Dr. Felix. "Acute psychotics shouldn't be treated there. We know they do better in familiar surroundings. Neither should the semi-acute. They develop 'hospitalitis' and withdraw further into unreality, thinking that the world has withdrawn from them.

"It's like a dead end for the chronic psychotic. At Philadelphia Hospital they took a group of these people whose average stay had been 13 years, put them in open, unlocked

wards, gave them small responsibilities and even got them downtown shopping. Within two years 80 per cent of these patients were out of the hospital and half were holding jobs. Furthermore, all but six or seven per cent stayed out. That's what personalized care can do.

"The same holds true for neurotics. It has been my experience that all of these patients need personalized care, and this you just can't get in most big institutions.

"Children, seniles, alcoholics, all do better when they retain their community ties."

What about the dangerously ill—those who might harm others or themselves?

There are few of these, replies Dr. Felix, about one out of every two or three hundred mental patients. This problem is not so prevalent that it cannot be handled in general hospitals.

"The problem has been," he said "that whole mental hospitals have been geared to the dangerous patient. This has resulted in the downgrading of all other patients. If you make it clear to a patient 'I don't trust you, I am afraid of you', the patient soon gets the message and behaves accordingly.

"Besides, we can usually handle the suicidal patient with drugs. If he's depressed, for instance, he can be given energizers and after a period of treatment with these—even ten days—and some personalized attention, we can pretty well say he's not going to commit suicide. Then we can tackle the rest of his problem in basically the same manner as the non-suicidal."

All of this seems to prove that Ben Franklin started off on the right idea—and most modern psychiatrists are certain that he did.

"We've had centralized hospitals in various forms for nearly 200 years," said Dr. Felix. "Yet at no time during this period has America had adequate mental health facilities on a national scale. We can only conclude that mental illness must be whipped at the grass roots."

Sight-Saving Conference Set April 12-14

"Setting Sights for Sight Saving," is the theme of the 1967 Annual Conference of the National Society for the Prevention of Blindness, Inc., which will be held April 12 through 14, at the Christopher Inn, Columbus, Ohio. More than 400 professional and volunteer workers in the prevention of blindness field are expected to attend.

During the conference distinguished members of the medical and allied professions from across the nation and throughout the world will participate in a program highlighting the latest developments in blindness prevention. Papers will be presented on industrial and school eye safety; community action for eye health; progress in detecting and combating potentially-blinding eye diseases. Eminent physicians and scientists will conduct panel discussions. Details on topics and speakers will be publicized later.

Included in the three-day national meeting will be a scientific and commercial exhibit program.

The National Society for the Prevention of Blindness, founded in 1908, is the oldest voluntary health agency nationally engaged in the prevention of blindness through a comprehensive program of community services, professional and public education and research.

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of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

February, 1967

No. 8

Cancer: Some Thoughts On Its Etiology

by

Walter B. Frommeyer, Jr., M. D.*

There is little wonder that the Congress of the United States has allocated large sums of money to the National Cancer Institute and the National Advisory Cancer Council of the United States Public Health Service for Research in Cancer when one considers some of the statistics of this dread disease. Apart from the morbidity, mental anguish and mortality associated with Cancer, which are literally enormous, the effects of cancer on the economy of this country are staggering. It is estimated that there are close to nine hundred thousand persons under treatment for cancer at all times in the United States. It is further estimated that the cost of hospital care, the rendering of medical care by physicians and allied health personnel, the use of drugs, radiation and surgery, is somewhat more than one-billion dollars

per year. The national economy is deprived of somewhere in the neighborhood of fifty-thousand man years of work each year because of cancer and it is estimated that the total economic burden of this disease in the United States is in the neighborhood of twelve-billion dollars per year.

As one facet of its attack on the problem of cancer, the National Cancer Institute has devoted a large portion of its research effort to the cause of cancer. The possibility that leukemia may be caused by a virus is so strong that a concentrated effort by the National Cancer Institute has been made in this direction.

It had long been known that the viruses were capable of causing cancer in animals under experimental conditions. The Nobel laureate, Dr. Peyton Rous, demonstrated the Rous sarcoma virus in fowl over 50 years ago. Some fifteen years ago, Dr. Ludwik Gross, clearly demonstrated the ability of a virus to cause leukemia in newborn mice. Workers at the National Cancer Institute and grantees from that Institute have followed these leads and have now demonstrated re-

*From the Department of Medicine, University of Alabama School of Medicine, University of Alabama Medical Center, Birmingham, Alabama.

Supported by Grant No. CA 03013-11, National Cancer Institute, National Institutes of Health, United States Public Health Service, Cancer Chemotherapy National Service Center.

peatedly the ability of certain viruses to produce various types of malignant tumors in the experimental animal. If such a relationship can be shown in man, then the obvious sequel would be the development of a vaccine or possibly some other method of preventing or controlling the disease. Particularly are these studies being pursued in the human leukemias.

The studies within the Special Virus-Leukemia Program are significant in several ways. In patients with leukemia or lymphoma, it has been possible by electron-microscopy to demonstrate virus particles of two different types. The first of these particles is called the "C"-type particle. It is now known to be identical in structure with viruses causing leukemia in laboratory animals. The second type of particle is very similar in size and shape to the herpes viruses but has been shown not to be identical with either herpes simplex or herpes zoster. Although confirmation is lacking, on an independent basis from several different laboratories, it is interesting that by the technique of immunofluorescence it was possible to detect the "C" particles in the cells of the peripheral blood and the tissues of patients with leukemia and in established tissue cultures of Burkitt lymphoma cells. No such reaction was observed in similar specimens from normal individuals. It has also been demonstrated, although not as yet confirmed from several independent laboratories, that immunofluorescence decreased in a number of leukemia patients with leukemia undergoing cancer chemotherapy when the patient's disease was in remission. During relapse or recrudescence of the leukemia, immunofluorescence again became intense.

A second important advance of the Special Virus-Leukemia Program is the ability to establish tissue cultures of human cancer cells in the laboratory. Again, these tissue cultures have evolved primarily from patients with Burkitt lymphoma and from patients with leukemia. It is from these human leukemia and lymphoma tissue cul-

tures that particles resembling herpes viruses have been demonstrated by use of the electron-microscope. So far immunologic and biologic studies indicate that these particular particles are not related to any known virus. Thus, if it is possible to induce cancer in animals by these virus particles, a new virus would become known and appropriate therapy or vaccination against it are possibilities. It is interesting that the virus derived from a Burkitt tumor is capable of causing proliferative brain lesions in a hamster within six months after inoculation with material from the Burkitt lymphoma cultures. It is also interesting that as other hamsters are inoculated at birth from these abnormal growths of the brain from the previously diseased hamster showed decreasing intervals of time between inoculation, the development of disease and ultimate death. This suggests increasing virulence of the virus with passage through the host.

At the present time there are fourteen known leukemia-inducing viruses for mice and rat tumors. These, however, fall into only three different antigenic types. Vaccines prepared against a single virus will protect mice against the leukemia inducing strains falling within that particular antigenic type. This is reminiscent of the various types of antipneumococcal antigens and the several types falling into a particular group being antigenically similar. Thus, at least in animal leukemia, it is possible to prevent leukemia through the use of specific antiviral vaccines.

To further complicate the picture are the results of one study in which by direct culture it was possible to isolate mycoplasma from blood and bone marrow specimens of four out of ten patients with acute leukemia. Control procedures on ten patients without leukemia or known tumor were negative for this organism. It is to be recalled that mycoplasma is intermediate in size between the viruses and bacteria and is the agent which causes primary atypical pneumonia in man. Study of the relationship of this agent and the human acute leukemias continues. It

has been shown that mycoplasma particles in tissue cultures create abnormal chromosomes and some new chromosomes not previously noted. This is reminiscent of the ribonucleic acid (RNA) type of virus which causes leukemia in experimental animals.

In addition to the viruses as a cause of leukemia in the experimental animal and the possibility of mycoplasma being involved in the process, there is the additional information that the products of the mold *Aspergillus flavus*, called aflatoxins, are also carcinogenic. These aflatoxins are capable of producing liver cancer in mammals, birds, and fish. By inference one must wonder about the frequency of liver cancer in parts of tropical Africa where foods contaminated by molds are an important part of the diet.

Similarly, cancer of the kidney, liver and intestine developed in small laboratory animals when the cycad seeds of the palm-like

botanical plant *Cycas circinalis* were included in the feed. The neurotoxic properties of the compound cicacin isolated from the seeds of the plant are well known.

There are a host of other environmental agents and air pollutants known to be carcinogenic but these will not be discussed here in the interest of time and space and the title of this paper.

In summary, there is abundant evidence that certain viruses are capable of inducing neoplasia in the experimental animal. There is accumulating some data which are more and more strongly indicative of a viral etiology of leukemia and Burkitt lymphoma in man. It is now possible to immunize the experimental animal through vaccination against the tumor-inducing viruses. That such will be true in man in relation to all types of cancer is a goal toward which no stone should be left unturned.

Night Driving Tips

Safety experts report that driving at night is more than twice as dangerous as driving during the day, says *Today's Health*, the magazine of the American Medical Association. Last year there were 10 persons killed for every 100 million vehicle miles traveled in darkness—four dead for every 100 million miles traveled in daylight.

Here are 10 vital night-driving tips from *Today's Health* to help you increase your chances of avoiding night accidents.

- * Slow down after dark. Even the legal speed limit may be too fast for safety on a dark night.

- * Check your lights. Keep your headlights as clean as your windshield. Be sure your taillights work.

- * Use your headlights at dusk and when visibility is poor, regardless of the clock time. Tilt your lights to avoid blinding the approaching driver.

- * If the auto ahead of you suddenly starts to weave, making you suspect that the driver's drowsy, flick your lights quickly several times. Head for the right hand lane and slow down.

- * Drunken drivers. Don't be one. Don't ride with one.

- * Don't wear sunglasses when driving at night.

- * In winter, turn down the heater so that the interior of the car is cool. It will help keep you awake. Open the windows occasionally for a blast of cold air.

- * Don't follow too closely. For every 10 miles per hour of speed allow at least one and a half car lengths between you and the car ahead.

- * If your car breaks down, get as far off the road as possible. Place warning flares 100 yards down the road. If you have only a flashlight, signal by pointing the light toward the stalled car.

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AMERICAN CANCER SOCIETY 

Perspectives In Cancer

by

William J. Hammack, M. D.*

The diagnosis of cancer in a patient will almost always initiate a look of horror and paralyzing fear, even though the malignancy may be superficial and curable. This, almost subcortical, response grips both patient and physician alike even more than with heart disease or vascular disease which may be more life threatening. The President, the Congress and the people have given the medical profession a mandate to "do something" about this problem. The pessimists among us will say that over 100 years of research have yet to show a biologically exploitable difference between the cancer cell and normal cells. The optimists will point to the "cures" obtained in choriocarcinoma and acute leukemia of children as well as encouraging new chemotherapeutic agents and regimens. It is important for each physician to re-examine the present status of cancer diagnosis, treatment and research and to determine what role he will be expected to accept in this task.

Treatment of malignant disease began in prehistoric time with rituals to the gods and various potions of roots and herbs. Only occasionally were these regimens even partially successful but a few such as Fowler's solution (potassium arsenite) and colchicine were promising. Surgery and radiation therapy completely dominated the next period even though it was apparent that only relatively localized tumors responded well to these programs. The obvious but disheartening fact was that most cancer is widely disseminated when first recognized. Thus a systemic cancerocidal agent was sought with the hope that the brilliant success of antimicrobial chemotherapy could be duplicated.

The secret chemical warfare agent with the code name HN₂ instituted the modern era of cancer treatment. When nitrogen mustard became generally available in 1946-1948, the internist and specifically the hematologist led the way because the leukemias and lymphomas were the most responsive malignancies. The striking paucity of information on intracellular metabolism and the natural history of cancers hindered the evaluation of the response to treatment. Secondary complications such as infection, hemorrhage and thrombosis were found to alter survival remarkably. Thus a new body of data had to be slowly and painfully accumulated on which to base development of new drugs as well as response to treatment. Although not yet contributing greatly to the treatment of cancer, the remainder of medicine has benefitted enormously by these studies.

For example, research on the "paraproteins" of myeloma has clarified normal gamma globulin antibody production in the plasma cell; introduced new diseases such as agammaglobulinemia, dysgammaglobulinemia, gamma globulin types, Heavy Chain disease, and macroglobulinemia. Pathologic mechanisms such as the hyperviscosity syndrome and Runt disease; the importance of the thymus and the development of amyloidosis are being studied with renewed interest.

The development of folic acid antagonists such as Methotrexate not only gave a better way to treat acute leukemia but also new insight into normal folic acid metabolism. Purine analogues such as 6-mercaptopurine block the conversion of inosinic acid to guanylic and adenylic acids allowing study of nucleic acid synthesis. Similarly, pyrimidine analogues (5-fluorouracil), alkylating agents (nitrogen mustard and Cytosan) and the antibiotics (actinomycin D and Puromycin)

*Professor of Medicine and Director, Division of Hematology, Medical College of Alabama, and Chief, Hematology Section, Veterans Administration Hospital, Birmingham, Alabama.

cin) have allowed incisive study of intermediary metabolism. The production, function and metabolism of RNA has been studied by observing the effect of 5-fluorouracil, 8-azaguanine, and other substituted analogues.

The search for the magic bullet for cancer has led to the synthesis of 4-hydroxy-pyrazolo-pyrimidine (Allopurinol) which promises to be the best agent for the prevention of uric acid nephropathy and possibly the control of gout. Another drug, 5-iodouridylic acid (IUDR) not only inhibits nucleic acid synthesis of the cell but also that of the Herpes virus. The corneal destruction leading to blindness can successfully be prevented by the prompt local application of IUDR.

The vast field of organ transplantation could not have the present state of development without the use of agents such as 6-mercaptopurine, 6-azaguanine, Imuran and radiation which inhibit antibody synthesis.

In addition to these peripatetic developments, the cancer research programs have and will continue to train clinicians in the science of chemotherapy and the art of managing a terminal cancer patient's physical, emotional and financial problems.

When all this is considered, I think we have gained much from our presently fruitless search for a cancer cure. But is this approach a blind alley? Will we ever be able to develop a differential weed killer that won't harm the grass? Can we develop a chemical so specific that it will destroy a malignant right hand and not harm the left? Of course, no one knows these answers but speculation of what the future may bring is encouraging.

The long succession of drugs developed, broths screened and antibiotics tested without finding an outstanding substitute for nitrogen mustard instills pessimism in this approach. In my opinion, it is possible but unlikely that new drugs will be found that are better than the ones presently available unless an etiology of cancer is found. Pres-

ent emphasis should therefore be on combinations of drugs, variation of the regimen and intense emphasis on etiology. A combination of vincristine, amethopterin, 6-mercaptopurine and prednisone (VAMP) has achieved the best results in childhood acute leukemia. Intensive radiation of stage I Hodgkin's disease has produced apparent cures. It is intriguing and tempting to combine drugs to see if stage II and III could be palliated more effectively or cured. In experimental animal systems such as the L1210 leukemia, the administration of drugs at precise time intervals has been much more effective. This takes advantage of the differential rate of growth of the neoplastic and normal cells. Preliminary human trials are also encouraging.

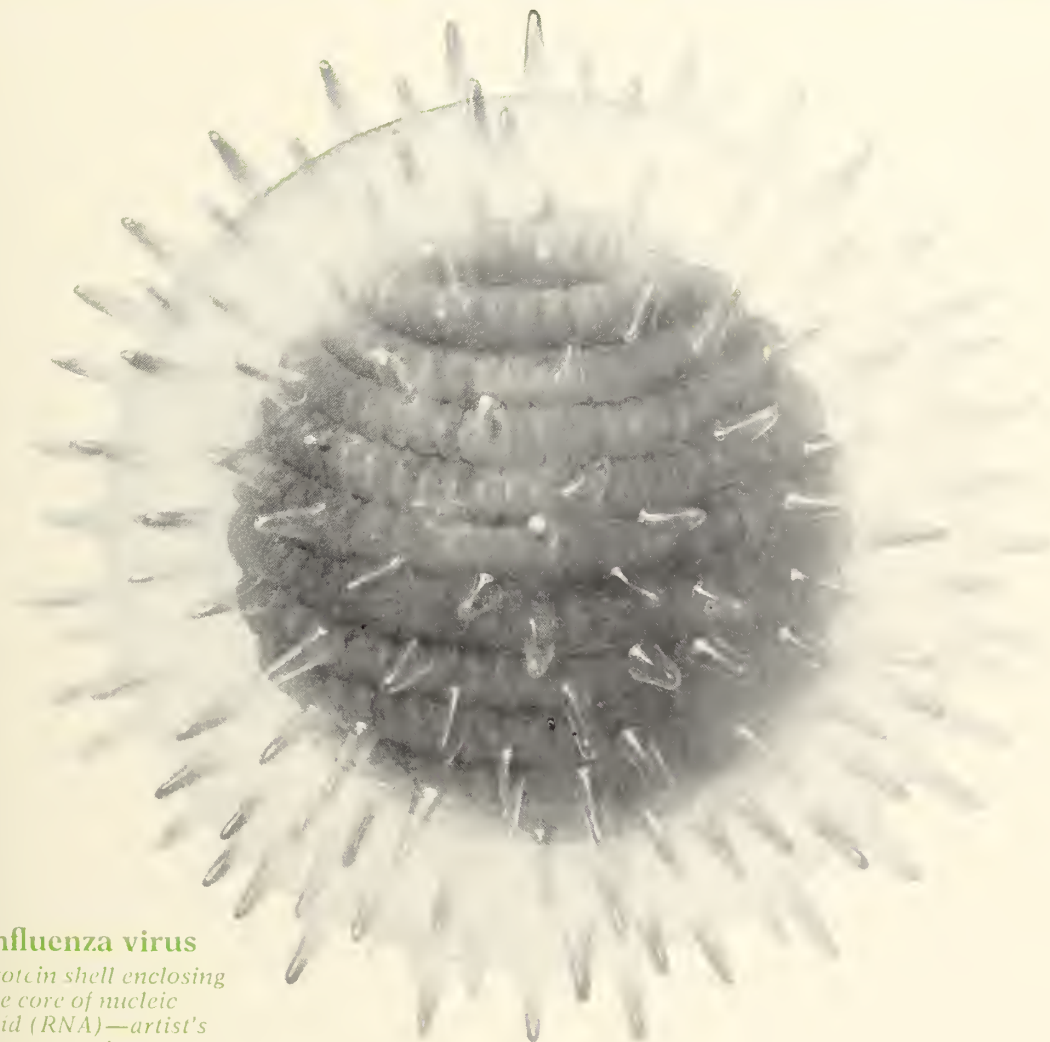
Utilization of immunologic techniques either alone or with chemotherapy shows some promise. Antibodies to lymphocytes, tumor tissues and cell constituents may provide a key to destruction of the malignant cells. Basic studies involving transfer of nuclei from one cell to another have shown that gene control may be possible and by altering DNA, the malignant cell may be forced to proliferate more normally.

Although no human cancer has yet been proven to have a viral etiology, this possibility intrigues the investigator. Isolation of such a virus or viruses not only would allow an antiviral antibody or drug to be developed as was done with poliomyelitis but, even more importantly, would allow prevention by a vaccine. The relative importance of chronic drug usage, air pollution, bacterial flora, repeated immunizations, diagnostic radiation, and a host of other factors on the initiation or precipitation of cancer must be established.

Thus the future extends a promise of developments in all phases of cancer control from basic fundamental cellular metabolism to bedside clinical management. In a "space ship society" one cannot allow presbyopia or pessimism to slow our progress in the fight against cancer.

New from Du Pont
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Influenza virus

*Protein shell enclosing
the core of nucleic
acid (RNA)—artist's
representation*

The incidence of influenza A₂. In this country, where influenza is one of the leading causes of morbidity, influenza A₂ (Asian) continues to be a serious medical problem. In 1957 influenza A₂ was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A₂ (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A₂ (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

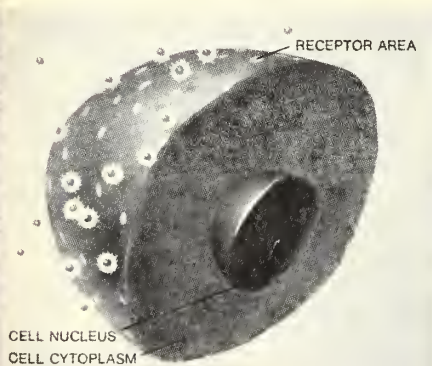
- ... the first and only oral chemical agent to prevent influenza A₂ (Asian).
- ... not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.
- ... unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.
- ... specifically active against all influenza A₂ viruses tested to date.
- ... not indicated for the prevention of influenzal or respiratory illness other than influenza A₂ or for the treatment of established disease.
- ... does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

- ... possible immediate influenza A₂ protection when taken following suspected contact.
- ... may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A₂ is especially hazardous.
- ... a high degree of safety in clinical use.
- ... simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

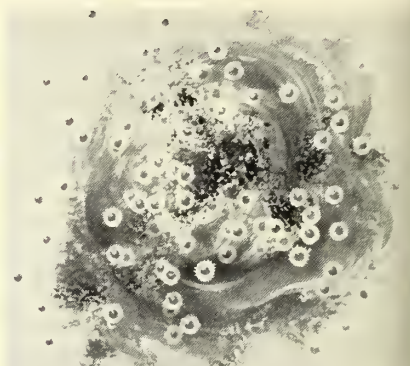
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas

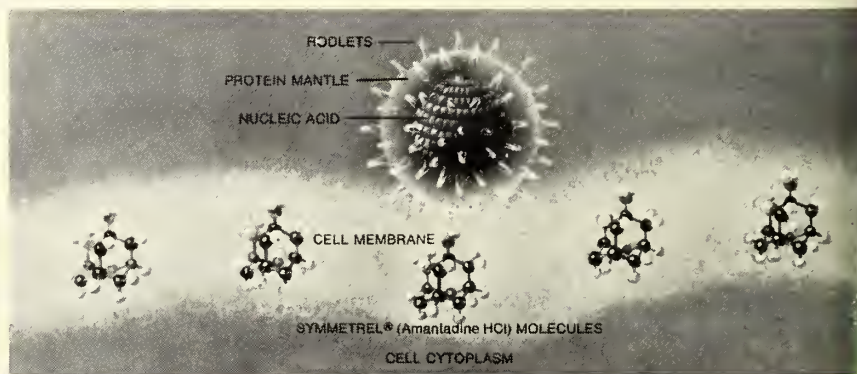
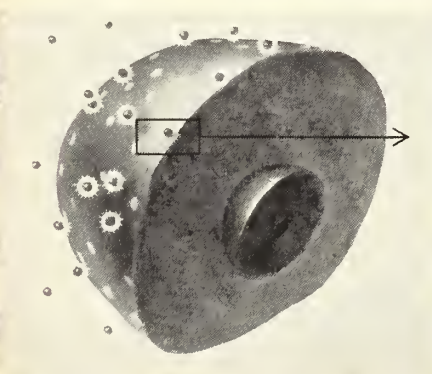


2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion¹



Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

¹ "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., *Journal of Bacteriology* 90,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A₂ in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A₂. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A₂ or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such

as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.

Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.



Symmetrel®

(Amantadine HCl)

A molecular barrier to virus penetration

arrest diarrhea

in • gastroenteritis • acute infections



LOMOTIL[®]

Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride 2.5 mg.

(Warning: May be habit forming)

atropine sulfate 0.025 mg.







Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- Ulcerative colitis
- Acute infections
- Irritable bowel
- Regional enteritis
- Drug therapy
- Food Poisoning
- Functional hypermotility
- Malabsorption syndrome
- Ileostomy
- Gastroenteritis and colitis

Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months	3 mg. 	½ tsp. 3 times daily
6-12 months	4 mg. 	½ tsp. 4 times daily
1-2 years . . .	5 mg. 	½ tsp. 5 times daily
2-5 years . . .	6 mg. 	1 tsp. 3 times daily
5-8 years . . .	8 mg. 	1 tsp. 4 times daily
8-12 years	10 mg. 	1 tsp. 5 times daily

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

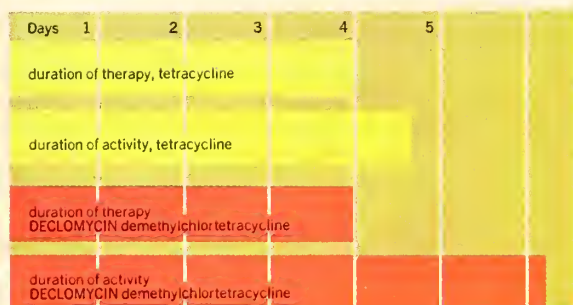
SEARLE

Research in the Service of Medicine

why wonder about a drug when you know

DECLOMYCIN[®] **DEMETHYLCHLORTETRACYCLINE**

produces 1-2 "extra" days' activity



1-2 "extra" days' activity
after the last dose to protect against relapse

one 300 mg tablet b.i.d.
OR
one 150 mg capsule q.i.d.

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essen-

tial. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If an adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meal since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg and 75 mg of demethylchlortetracycline HCl.



For he's a jolly good fellow



But what does he think?



Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.

Bamadex® Sequels®

DEXTRO-AMPHETAMINE SULFATE (15 mg.) SUSTAINED RELEASE CAPSULES
WITH MEPROBAMATE (300 mg.)

**to help establish
a new dietary pattern**

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopopular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.



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Pearl River, New York

695-G



Report on Actions of the House of Delegates, American Medical Association, 20th Clinical Convention, November 27-30, 1966 Las Vegas, Nevada

This is a supplement report of the proceedings of the House of Delegates at the 20th Clinical Convention of the American Medical Association held November 27-30, 1966 in Las Vegas, Nevada mailed to the membership of The Medical Association of the State of Alabama.

Education for family practice, billing and certification procedures under Public Law 89-97, proposed revisions of the Selective Service System, payments for professional services, compensation for house officers, and use of the terms "ethical" and "unethical" were among the major subjects acted upon by the House of Delegates at the American Medical Association's 20th Clinical Convention held November 27-30 in Las Vegas, Nevada.

At the Wednesday session Dr. Robert Mayo Tenery of Waxahachie, Texas, general surgeon and past president of the Texas Medical Association, was elected to fill the unexpired term of the late Dr. William A. Hyland, ending June, 1969, on the Council on Constitution and Bylaws.

Selective Service Proposals

The report, prepared by the Council on National Security, cited three basic flaws in the Selective Service System as it pertains

(Continued on Page 952)



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

PARKWOOD HOSPITAL

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(Continued from Page 950)

to the selection of physicians for military service: 1) There is no medical group directing the allocation of physicians; 2) There is no medical group directing the priorities to be used for calling physicians to active duty; 3) There is a need for a stronger medical voice within the Department of Defense.

The proposed commission would be appointed by the President with consent of the Senate. It would replace the Health Resources Advisory Committee and the National Advisory Committee to Selective Service.

Prescribing of Drugs

The House adopted a report by the Board of Trustees reaffirming the position of the AMA regarding the prescribing of drugs. The report states:

"The present policy of the American Medical Association is that physicians should be free to prescribe drugs generically or by brand name for *all* of their patients, whether they are paying, Medicare, or indigent patients—the primary consideration being the best interests of the patient. Medical considerations must be paramount in the selection of drugs. In addition, the physician also has an obligation to be mindful of the economic consequences of the treatment he prescribes."

Choice of a Laboratory

The House adopted a report of the Judicial Council which answered questions which have been raised about laboratory services. The report stated:

"Medical considerations, not cost, must be paramount when the physician chooses a laboratory. The physician who disregards quality as the primary criterion or who chooses a laboratory because it provides him with low cost laboratory services on which he charges the patient a profit, is derelict in not acting in the best interests of his patient. However, if reliable quality laboratory services are available at lower cost, the *patient* should have the benefit of the savings."

Statement on Chiropractic

On recommendation of the Board of Trustees, the House adopted a policy statement submitted by the Committee on Quackery. The statement notes "the position of the medical profession that chiropractic is an unscientific cult whose practitioners lack the necessary training and background to diagnose and treat human disease" and pointed out that "decisions by the nation's highest courts [justify] the medical profession's educational program of alerting the nation to the public health threat posed by the cult of chiropractic."

Statement on Alcoholism

The House reaffirmed the 1956 policy statement on admission of alcoholics to general hospitals. The statement urged hospital administrators and medical staffs to look upon alcoholism as a medical problem and to admit patients who are alcoholics to their hospitals for treatment, with such admissions being made after due examination, investigation and consideration of the individual patient. The House, in Las Vegas, recommended more adequate implementation of the 1956 statement and urged that "insurance companies and prepayment plans be encouraged to remove unrealistic limitations on the extent of coverage afforded for the treatment of alcoholism."

Use of the Terms "Ethical" and "Unethical"

The Judicial Council, which had been asked to comment on use of the terms "ethical" and "unethical," submitted the following report which was adopted by the House:

"Historically, the term 'ethical' has been used in opinions and reports of the Judicial Council and in resolutions adopted by the House of Delegates to refer to matters involving (1) moral principles or practices; (2) customs and usages of the medical profession; and (3) matters of policy not necessarily involving issues of morality in the practice of medicine. The term 'unethical' has been used to refer to conduct which fails to conform to these professional standards, customs and usages, or policies, as interpreted by the American Medical Association.

"Unethical conduct involving *moral principles*, values and duties calls for disciplinary action such as censure, suspension, or expulsion from medical society membership.

"Failure to conform to the *customs and usages* of the medical profession may call for disciplinary action depending upon the particular circumstances involved, local attitudes, and how the conduct in question may reflect upon the dignity of and respect for the medical profession.

"In matters strictly of a policy nature, a physician who disagrees with the position of the American Medical Association is entitled to freedom and protection in his point of view."

Other Actions

Passed two resolutions opposing the "dual fee" practice of determining the rate of payment for a physician's services solely on the basis of his type of practice;

Approved a Board report recommending that *Social Security* laws be amended so that physicians entering the program for the first time may obtain earlier eligibility and improved benefits;

Asked that the Board of Trustees direct the Council on Legislative Activities to continue to pursue with committees of Congress the need for amending the *Self-Employed Individuals Tax Act* to provide self-employed individuals with opportunities for deferring current earnings and taxes comparable to opportunities presently enjoyed by employed individuals;

Reaffirmed its support of the principle that every ethical licensed doctor of medicine who needs and desires them should have *staff privileges*, commensurate with his training and skill, in at least one accredited community hospital;

Recommended that each *hospital* should have at least one voting doctor of medicine member on its *Governing Board* who, preferably, should either be appointed or elected by the hospital medical staff from its membership;

Approved Board recommendations that "the AMA support the need for a significant improvement in the income of the *registered nurse*" and that "the AMA continue to support in principle all current nationally approved educational programs for nurses";

Agreed with the Board that the Council on Postgraduate Programs be renamed as the *Council on Scientific Assembly* and that its functions be redefined to enable concentration on AMA scientific meetings;

Adopted a resolution that the AMA take measures to insure the attention of medical societies to the need for appropriate utilization of *retired physicians and inactive nurses*;

Passed a resolution on the determination of *elderly applicants'* eligibility for automobile liability insurance and driver licensure which said that "although physicians are willing to examine applicants and determine whether or not the applicant meets specified physical standards for automobile liability insurance or for licenses to operate motor vehicles, the determination of what standards should be required or whether the driver is insurable and should be licensed to drive is the responsibility of the insurance companies concerned and of the state agencies issuing licenses, respectively";

Rescinded Resolution 104 which had been adopted by the House in June, 1966;

Endorsed the principle of *free choice* of physician and medical facility under Title XIX of Public Law 89-97;

Urged that the AMA continue to promote constructive legislation improving *existing governmental health plans* and continue to offer constructive advice;

Approved a Board recommendation that no special section of *The AMA NEWS* be set aside for county society communications, but that news of county society activities continue to be an important part of *The AMA NEWS*;

Recommended that *driver education* should be an integral part of the secondary school curriculum and be offered to all students;

(Continued on Page 956)

**How long will it take him
to recover from the flu
if he just doesn't care?**



Does he really care?
Is he alert, encouraged,
positive and optimistic
about getting out of bed
and back to work soon?

Or is he giving in to
the depressing impact
of confinement?

When functional fatigue
complicates convalescence,
Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that so often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic[®]

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

G-7907

(Continued from Page 953)

Approved a Council on Medical Service report providing guidelines for collaboration of physician, social worker and lawyer in helping the *unmarried mother* and her child, and;

Referred to the Board for consideration and appropriate implementation, a resolution urging the AMA to expand its programs and studies in the field of *crime prevention*.

Awards and Presentations

Glen W. Geelhoed of Ann Arbor, a medical student at the University of Michigan, was announced on Tuesday as first-place winner in the Norman A. Welch, M. D., Medical Ethics Essay Contest sponsored by the AMA Judicial Council. At the same session the delegates heard an address by Dr. Malcom E. Phelps, field director of the AMA Volunteer Physicians for Vietnam, who said that the American physician is making a "tremendous impression" on the South Vietnamese people.

Guidelines For Orientation Of New Members

1. Ordinance XXXIV of the Medical Association of the State of Alabama provides the following:

"Ordinance XXXIV—Orientation of New Members

Section 1. An orientation program shall be established for members elected to membership on and after January 1, 1960. This will be presented at the annual meeting of the Medical Association of the State of Alabama held in April each year.

Section 2. On and after January 1, 1960, those physicians elected to membership in a county medical society shall have provisional status as members of the county medical society and the Medical Association of the State of Alabama

until they have participated in the orientation program provided by the Association. If a provisional member fails to attend this program within a two-year period, unless he has been excused for a just cause by the county Board of Censors and the State Board of Censors, he will lose his status as a provisional member in his county medical society and the Medical Association of the State of Alabama, and must be re-elected upon reapplication to the county medical society. The two-year period shall begin with the date of acceptance as a provisional member.

Section 3. When a provisional member has attended an orientation program, the county medical society shall be notified by the secretary of the Association.

Section 4. The dues and privileges of members holding a provisional status shall be identical to the dues and privileges of the regular members."

2. Each county medical society shall be instructed to report to the State headquarters *promptly* when an individual becomes a member of the county medical society and as soon as this is reported to the Association, he will be considered a provisional member of the Association.
3. Valid excuses may be: serious illness of the provisional member, serious illness in the immediate family, a death in the immediate family, or events of similar gravity.
4. A conflict in dates with another meeting will not be considered as a valid excuse since the member's first obligation is to his county and State society.
5. Whenever a new member is properly excused from attending an orientation program during the first year of membership, it means that they only have an additional year to fully qualify. Some have misunderstood this in that they believed they had an additional two years from the date of excuse. Whenever they

(Continued on Page 961)

DORSEY

winter 1966

Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.



this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts

"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.¹

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.²

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.³ The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.⁴ The cilia then sweep the particu-



late matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.⁵

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.⁶ The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.⁷ The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.⁸

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.⁹ In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.¹⁰ The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.¹¹ The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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comforting thing
to know



For postnasal drip, clogged ears
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Triaminic[®] timed-release tablets

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

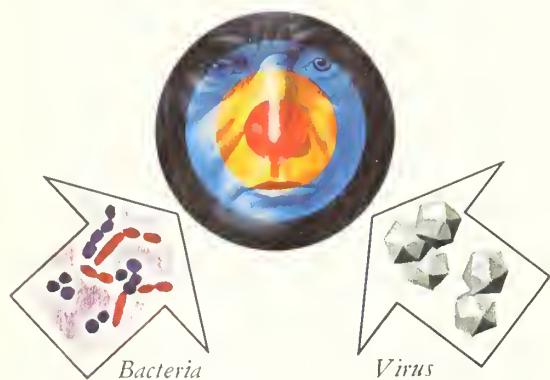
keep patients comfortable 'round the clock. 24-hour decongestion on just a single tablet dosed morning, mid-afternoon and at bedtime. Patients regain senses and can breathe, smell and taste again.

Triaminic. Isn't that a comforting thing to know?

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

precipitate an attack of rhinorrhea in hay fever sufferers.¹² Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.



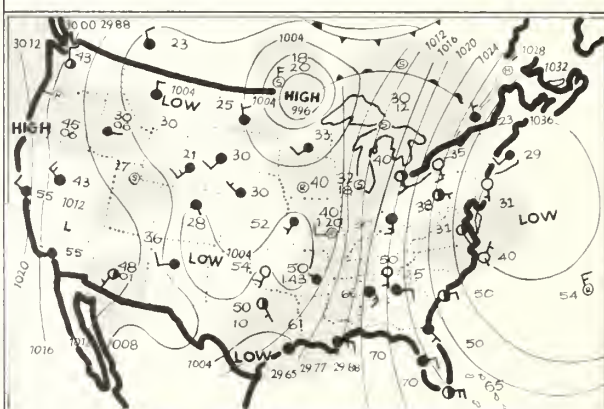
The complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.¹³ This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections, antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases,

symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

- ### References
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RAIN TURNING TO SNOW, INCREASING WINDS AND DROPPING TEMPERATURES FOLLOWED BY COUGH, CONGESTION AND PAIN

Tussagesic® provides up to 24-hour coverage of the tough cold with a single timed-release tablet dosed morning, midafternoon and at bedtime. Coughs are broken up, runny and stuffed noses are cleared and pain is relieved.

Each Tussagesic® timed-release tablet contains:

Triaminic®	50 mg.
(phenylpropanolamine hydrochloride 25 mg.; pheniramine maleate 12.5 mg.; pyrilamine maleate 12.5 mg.)	
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Terpin hydrate	180 mg.
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Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Precautions:** Patient should not drive a car or operate dangerous machinery if drowsiness occurs. Except under professional care, do not give to patients under 12 yrs. or those who have persistent cough, high fever, heart or thyroid disease, hypertension or diabetes or use for more than 10 days.

(Continued from Page 956)

are properly excused, they should be notified in writing of this provision by the Secretary-Treasurer of the State Association.

6. These guidelines, when approved, shall be sent to each county medical society, the Medical College of Alabama, and shall be *published annually* in the Journal of the Medical Association of the State of Alabama in the *January issue*.

Respectfully submitted,

E. Bryce Robinson, Jr., M. D.,
Chairman

James E. Cameron, M. D.

G. H. Stokes, M. D.

Approved by the Board of Trustees on December 11, 1966.

Approved by the Board of Censors on December 21, 1966.

* * *

Psychiatrists are showing increasing concern about the high incidence of psychoses and other mental illnesses in children, and are instituting broad programs to treat them. To help find the children who need aid and to devise means of providing therapy, the National Institute of Mental Health has made a \$500,000 grant to the newly formed Joint Commission on the Mental Health of Children. The commission consists of representatives from 13 major national organizations, including the AMA, American Psychiatric Association, the American Academy of Pediatrics, and the American Academy of General Practice.



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Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals □ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients

and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction □ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy □ *We will be pleased to provide further information upon request.*

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Ethinyl estradiol is the most active estrogen known. In addition to its high potency, Novestrol offers patients the advantages of minimal side effects, low cost, and convenience. Usually only a single daily dose is necessary.

Description: Each green, sugar-coated tablet contains 0.02 mg. of ethinyl estradiol U.S.P., a pure synthetic estrogen derivative, the most active estrogen known.

Indications: Menopausal syndrome and female hypogonadism.

Contraindications: Patients with tumors which estrogen might stimulate.

Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.



WILLIAM H. RORER, INC. Fort Washington, Pa.

IMPACT OF TITLES 18 AND 19

By H. Philip Hampton, M. D.

Member, AMA Committee on Welfare Services

"I am convinced that sooner or later it will become clearly evident that a democracy cannot provide personal services efficiently nor economically and must contract with the private sector for medical and other personal services government is obligated to provide."

TITLE 19

A PHYSICIAN'S VIEW

Title 19 of the Social Security Amendments of 1965 is no new departure from the traditional principle of government responsibility to provide medical care for those in need. The new law requires high quality medical care to be equally available to all unable to provide for themselves and outlaws the common practice of imposing on voluntary medical institutions to give care without adequate compensation.

We are fortunate in having such a medical foundation in Florida and to have the corporate body of Florida Blue Shield composed largely of the house of delegates of the Florida Medical Association. Blue Shield has been named the carrier for Title 18 B insurance in Florida, and we hope to establish this method of implementing Title 19 for cash welfare recipients beginning July 1, 1967. Subsequently, the insurance carrier can be used as a fiscal agent to provide for medical expenses of the needy sick not preidentified but determined to be eligible for medical aid under the provisions of Title 19.

Adequate payment for services rendered the needy sick as required by Title 19 provides opportunity for the medical staff in teaching hospitals to acquire funds to be used

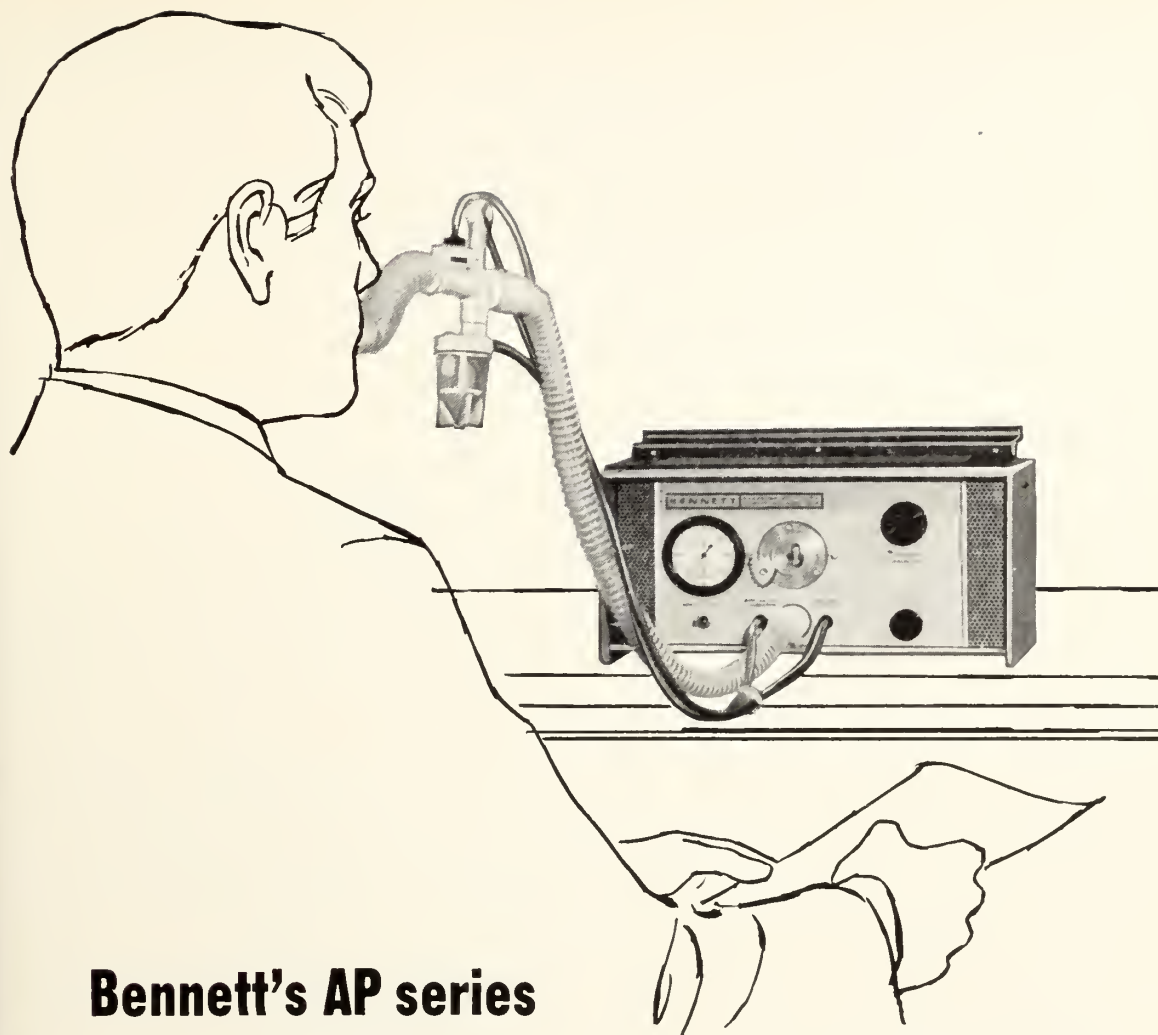
in fulfilling their medical and educational responsibilities. Voluntary assignment to a medical staff fund of fees available for services rendered Title 19 recipients by teaching staff members through the medical training program will provide support of continuing medical education.

Otherwise, the available fees will be lost and support of medical education must come from hospital and government sources or if the fees are collected by the teaching staff member he will be in the position of profiting from the efforts of the resident staff. Some hospitals have begun another alternative—employing physicians to provide the services with the understanding that fees will be paid to the hospital.

Indeed, the method of collecting and administration of fees for tax supported medical care provided Title 19 eligible patients who present themselves to the hospital for care may well determine whether the physician and medical staff have the responsibility and control of medical care. Responsibility and control of medical care will be transferred to hospitals only by default of the medical staff.

Future development of the tax supported medical programs of Title 18 A and B and Title 19 will be determined largely by the

(Continued on Page 966)



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Bennett's AP units are therapeutically efficient. The famous, flow-sensitive Bennett Valve—the valve that "breathes" with the patient—gives proper control of pressure patterns. The Bennett/Twin Nebulizer (included with all AP

Models) provides optimum volume and particle size for medication and humidification. Oxygen enrichment may be added with other Bennett accessories.

Bennett makes two AP models—the portable AP-4, as shown and the economy Model AP-5. Both are electrically operated, quiet, compact and quality built.

Bennett IPPB equipment is sold or rented only on prescription by a physician or on order of a hospital or other recognized medical institution.

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(Continued from Page 964)

relation of expenditures to available financial support in each program.

The dangers of Title 19 are abuses leading to excessive expenditures. Political abuse of increasing eligibility for tax supported medical care to unrealistic levels can be controlled by legislation. However, abuse by the vendor and recipient cannot be readily controlled by legislation or restrictive governmental regulations. Cooperation of the practicing physician is required for effective utilization control. The vehicle and additional incentive for effective cooperation is provided by the medical foundation contingency reserve administration.

Inadequate implementation of Title 19, however, would inevitably lead to extension of Title 18 A (Social Security tax supported hospital care) which would produce a system of institutional medical care that has been proven repeatedly to be a high cost, low production method of providing health services and, in my opinion, would be a catastrophe for quality medical care and the social security taxpayer.

I am convinced that sooner or later it will become clearly evident that a democracy cannot provide personal services efficiently or economically and must contract with the private sector for medical and other personal services government is obligated to provide. I have tried to outline methods available under present law to accomplish this now.

After World War II it became obvious that most counties were not adequately fulfilling their constitutional responsibility to provide health care for the needy sick. Institutional care provided in charity hospitals was usually of poor quality and costly. Imposing on voluntary health entities to provide for the indigent without reimbursement was a common practice which, in effect, taxed the paying patient and hampered development of health facilities. State medical assistance programs

were established to aid the counties in providing health care for the poor but they were usually inadequate.

In 1960, the federal government offered financial aid for state medical assistance programs through the Kerr-Mills law which permitted compensation to vendors of health services for those considered eligible for tax supported health care but did not require the state program to meet criteria of adequacy.

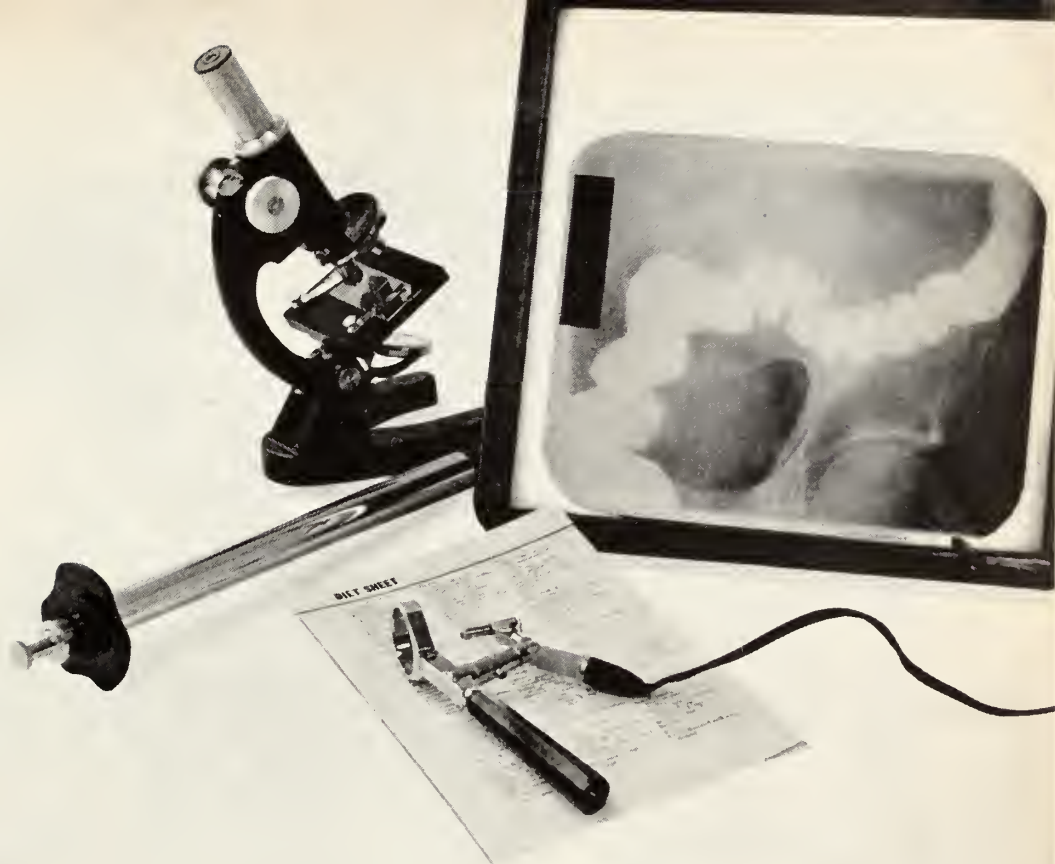
At the outset, welfare officials believed health care for welfare recipients should be administered within the welfare system and apart from the regular method of providing health care. The medical profession was not inclined to encourage that concept. Welfare medical programs, therefore, have grown like Topsy—uncoordinated, poor, and variously administered.

Topsy is a big girl now, and through Title 19 of Public Law 89-97, her guardians are able to provide a place for her in the regular channels of medical care by adequately compensating the vendors of services, and the medical profession can provide medical services in a more organized manner. Implementation of Title 19 through the insurance carriers of Title 18 A and B is a convenient and logical method of accomplishing the objective of adequate tax supported health care for those in financial need.

Physicians' medical and surgical care wherever rendered, including x-ray and laboratory services as required by Title 19, may be provided by purchase of Title 18 supplemental medical insurance for aged welfare recipients and insuring the same benefits for welfare recipients less than 65 years of age by state contract with the insurance carrier for Title 18 B. Deductibles and coinsurance for all categorical (cash) welfare recipients must also be paid and can be included in the state contract with the insurance carrier. The premium should be experience rated.

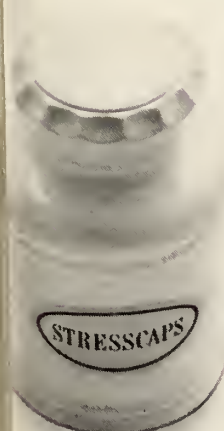
In preparing recommendations for imple-

(Continued on Page 968)



in digestive disorders:

B and C vitamins aid therapy. Nausea, vomiting, and severe diarrhea may seriously interfere with the digestion and absorption of nutrients. STRESSCAPS capsules, containing therapeutic quantities of vitamins B and C, may help meet the needs of these patients. In digestive disorders, as in many stress conditions, STRESSCAPS vitamins aid therapy.



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(Continued from Page 966)

menting Title 19 in Florida, we have obtained actuarial estimates of premium costs for buying into Title 18 B supplementary medical insurance for aged welfare recipients and paying the deductible and coinsurance, providing the same benefits for under age 65 adult welfare recipients and for eligible children. On the basis of an estimated 250,000 welfare recipients in 1967 (80,000 aged, 50,000 adults under age 65, and 120,000 children) and approximate matching federal percentages available to Florida, we have prepared the following table of costs for:

insurance carrier of Title 18 B through the state contract for all welfare recipients to withhold 20 per cent of the payment of charges in a contingency reserve to insure adequacy of the annual premium and distributing the contingency fund remaining in the last month of the contract year.

In this manner states will be assured of the annual appropriation needed for the medical care program, the insurance carrier will be protected from bankruptcy, and the physician will have the opportunity of providing medical care for welfare recipients in the same manner that care is provided for

Physicians' services including laboratory and x-ray

Benefits of Title 18 B paying deductibles and coinsurance

Insurance Carrier of Title 18 B

	Monthly	Annually
Aged 65 and over		
Basic Insurance Premium (equal federal matching)	\$3	\$36
For 80,000 recipients	\$240,000	\$2,680,000
State funds (25 per cent)	\$60,000	\$670,000
Deductible and coinsurance premium	\$4.12	\$49.44
For 80,000 recipients	\$329,600	\$3,955,200
State funds (25 per cent)	\$82,400	\$988,800
Under age 65 adults		
Benefits of Title 18 B covering deductibles and coinsurance		
Premium	\$9.57	\$111.84
For 50,000 recipients	\$478,500	\$5,592,000
State funds ($\frac{1}{3}$)	\$159,500	\$1,846,000
Children (under 21 years)		
For 120,000 recipients	\$554,400	\$6,652,800
State funds (20 per cent)	\$110,800	\$1,300,560
Total premium 250,000 recipients		\$18,880.00
Total state funds required		\$4,853,000

Insuring the poor is a familiar role for Blue Shield, and participating physicians have provided services for charges within the premium allowances. This principle can be continued to a good end by permitting the

the rest of the population.

Furthermore, if physicians choose to permit a portion of the contingency reserve to accrue to a fund for continuing medical edu-

(Continued on Page 971)

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Obesity Oddities

FACT & LEGEND



**NAPOLEON
BONAPARTE**

**LOST THE BATTLE OF WATERLOO
BECAUSE HE WAS TOO FAT!**

ACCORDING TO THE NEW YORK TIMES OF APRIL 13, 1890, THE DEFEAT OCCURRED BECAUSE HE FAILED TO CHECK HIS INTELLIGENCE INFORMATION. "IT WAS A MATTER OF MERE INDOLENCE AND THIS INDOLENCE WAS CAUSED BY FAT."

SOURCE: JAMA 186:65 (OCT. 5) 1963.

GALLSTONES

HAVE BEEN FOUND IN 60% OF PATIENTS WHO WEIGH MORE THAN 300 POUNDS, 45% HAVE DIABETES, AND 15-20% HAVE HIGH BLOOD PRESSURE.

SOURCE: DUNCAN, G.G. SCIENCE NEWS LETTER, 83:403 (JUNE 29) 1963



DIET DROPPOUTS

ACCORDING TO DRs. SHIPMAN AND PLESSET "APPARENTLY NO DIETER SUCCEEDS WHO IS VERY ANXIOUS OR DEPRESSED."

THE AMBAR FORMULA PROVIDES METHAMPHETAMINE TO HELP ELEVATE THE MOOD AND PHENOBARBITAL TO HELP REDUCE ANXIETY.

*SOURCE: ARCHIVES OF GENERAL PSYCHIATRY 8:26 (JUNE 1963).



THE BOOK "PRAY YOUR WEIGHT AWAY" URGES READERS TO "ASK GOD TO HELP YOU LIKE EXERCISE" FOR 15 MINUTES A DAY.

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CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

Also available: Ambar #1 Extentabs®—methamphetamine hydro-

Ambar#2 Extentabs®

methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming)

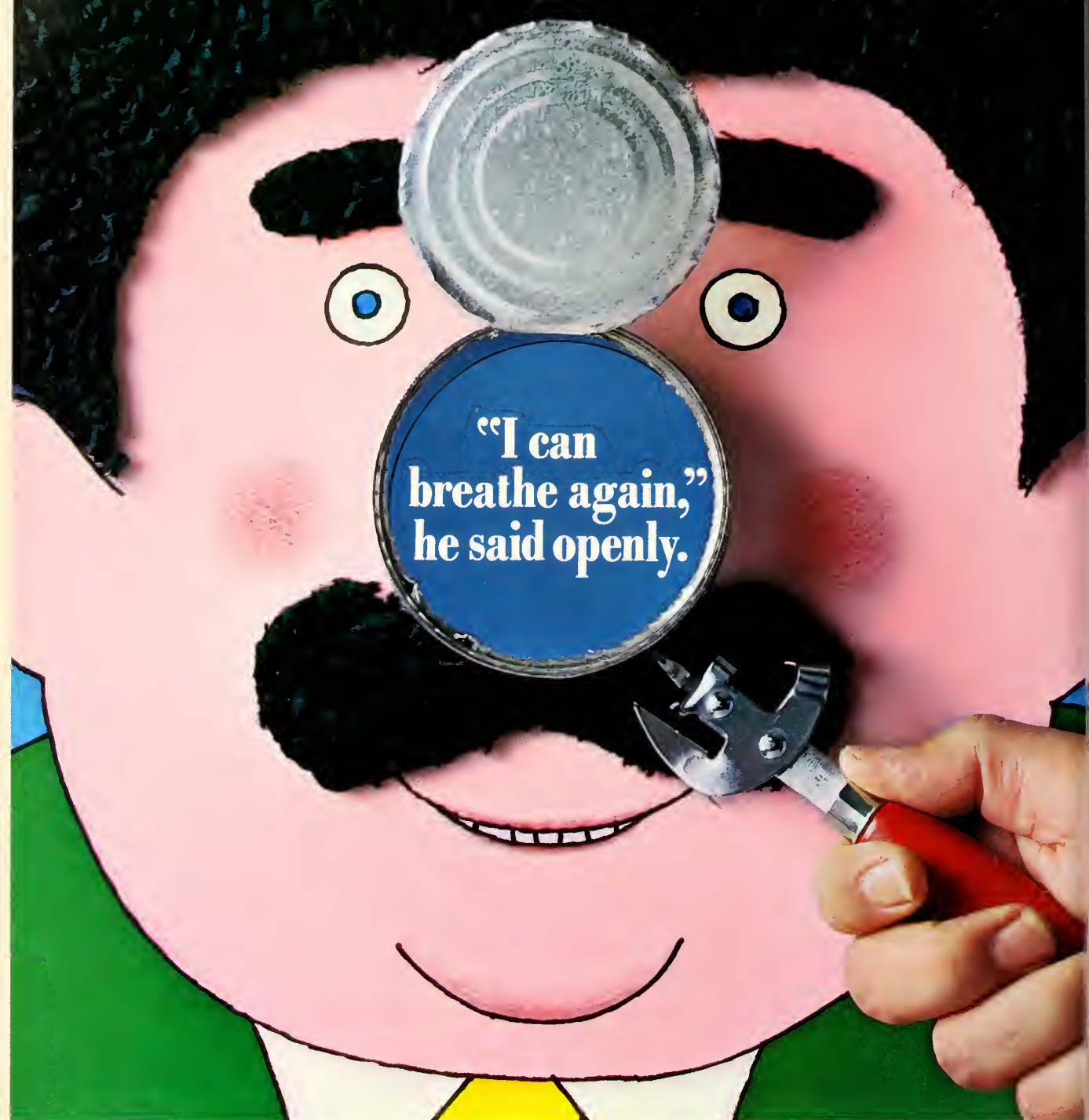
Contraindications: Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. See package insert for further details.

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chloride 10 mg., phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

BRIEF SUMMARY—Indications: Ambar suppresses appetite and helps offset emotional reactions to dieting. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension.



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(Dimetane® [brompheniramine maleate], 12 mg.;
phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

up to 10-12 hours clear
breathing on one tablet

It's clear—Dimetapp lets your "stuffed-up" patients breathe easy again. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. The key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done...in a hurry.

Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy. **Precautions:** Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. **Side Effects:** Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.

Dosage: 1 Extentab morning and evening. **Supplied:** Bottles of 100 and 500.

A. H. ROBINS CO., Richmond, Virginia 23220

A-H ROBINS

IMPACT OF TITLES 18 AND 19

(Continued from Page 968)

cation and similar purposes administered by the state and county medical associations, a bonus of benefits to all in better quality of medical care can result from this method of implementing Title 19.

Continuing medical education is a vital factor in modern medical care and is of such importance that it can no longer be left to chance voluntary effort. With the many demands on his time, the practicing physician finds it difficult to afford the time and expense of participating in medical educational activities. An educational fund derived from the efforts of physicians and directed by them can be a potent influence in improving the efficiency and effectiveness of continuing medical education and the dynamic participation of the practicing physician.

Cooperation between a foundation of the state medical association and the carrier of Title 18 B in handling the contingency reserve of the state insurance contract will provide a vehicle for supervision of the Title 19 medical care program and a continuing utilization study by the medical profession.

Ah-Ah-Choo!!

Reporting of daily pollen counts by newspapers, radio and television has fostered the erroneous idea that there should be a definite correlation between the pollen count and severity of a patient's symptoms, according to Dr. Murray M. Albert of Brooklyn, N. Y.

This misconception has created "considerable confusion" among patients whose symptoms antedate the appearance of appreciable amounts of pollen in the air or whose symptoms persist long after the pollen concentration becomes negligible.

The pollen count represents the average amount of pollen trapped over a period of 24 hours, he said, but it does not indicate how the pollen concentration in the air may have varied during the day. The data have certain limitations. In addition to the local pol-

len production, wind speed, wind direction, humidity and time of day are extremely important factors that may affect the pollen count.

A study has shown that the highest concentration of ragweed pollen occurs between 9 a. m. and 1 p. m. During August, 67 per cent of the average daily pollen crop was collected during these hours and 50 per cent during September. Only 10 per cent of the 24-hour pollen yield was collected from 6 p. m. to 6 a. m. Based on these findings, it was concluded that the concentration of pollen inhaled at certain times during a 24-hour period is actually higher and the severity of symptoms much greater than would be expected from the total average 24-hour count unless this fluctuation is recognized.

"There are innumerable factors other than pollen concentration in the air that contribute to a patient's response to pollen exposure at any particular time," Dr. Albert emphasized. "One of the most important factors to be taken into consideration is the patient's threshold of sensitivity at the time, a condition that varies between individuals and at different periods in the same individual."

In 122 patients treated for hay fever in the allergy clinic of the Jewish Hospital of Brooklyn, there was a direct correlation during the first half of the ragweed season between the rise in pollen count and an increase in intensity of nasal obstruction. During the second half of the season, there was far less parallelism. The investigator attributed this finding to the fact that the nasal mucosa was much more responsive to stimulation early in the hay fever season. Later, the nasal mucosa tends to become chronically swollen and resistant to further stimulation.

Many additional factors, such as sensitivities to molds, house dust, occupational allergens, house pets, other inhalants, foods and drugs, may contribute to the severity and persistence of allergic symptoms and should not be overlooked in interpreting the significance of the pollen count, the allergist concluded.—*New York J. Med.*, Sept. 15, pp. 2409-2413.

OPINIONS OF THE AMA JUDICIAL COUNCIL

Printed are copies of seven opinions adopted by the Judicial Council at its November 26, 1966 meeting. Three of these opinions (Ethical Guidelines for Clinical Investigation, Laboratory Services, and the Use of Terms "Ethical" and "Unethical") were presented to and adopted by the House of Delegates. The other four opinions (Association Between Doctors of Medicine and Optometrists, Charging Penalty for Over-Due Accounts, Participation by Physicians in Bank Card Programs, and Guidelines for Physicians in their Relations with the Communication Media) represent final opinions of the Judicial Council on subjects of current interest.

Ethical Guidelines for Clinical Investigation

At the 1966 Annual Convention of its House of Delegates, the American Medical Association endorsed the ethical principles set forth in the 1964 *Declaration of Helsinki* of the World Medical Association concerning human experimentation. These principles conform to and express fundamental concepts already embodied in the *Principles of Medical Ethics* of the American Medical Association.

The following guidelines, enlarging on these fundamental concepts, are intended to aid physicians in fulfilling their ethical responsibilities when they engage in the clinical investigation of new drugs and procedures.

1. A physician may participate in clinical investigation only to the extent that his activities are a part of a systematic program competently designed, under accepted standards of scientific research, to produce data which is scientifically valid and significant.
2. In conducting clinical investigation, the investigator should demonstrate the same concern and caution for the welfare,

safety and comfort of the person involved as is required of a physician who is furnishing medical care to a patient independent of any clinical investigation.

3. In clinical investigation *primarily for treatment*—
 - A. The physician must recognize that the physician-patient relationship exists and that he is expected to exercise his professional judgment and skill in the best interest of the patient.
 - B. Voluntary consent must be obtained from the patient, or from his legally authorized representative if the patient lacks the capacity to consent, following: (a) disclosure that the physician intends to use an investigational drug or experimental procedure, (b) a reasonable explanation of the nature of the drug or procedure to be used, risks to be expected, and possible therapeutic benefits, (c) an offer to answer any inquiries concerning the drug or procedure, and (d) a disclosure of alternative drugs or procedures that may be available.
 - i. In exceptional circumstances and to the extent that disclosure of information concerning the nature of the drug or experimental procedure or risks would be expected to materially affect the health of the patient and would be detrimental to his best interests, such information may be withheld from the patient. In such circumstances such information shall be disclosed to a responsible relative or friend of the patient where possible.
 - ii. Ordinarily, consent should be in writing, except where the physician deems it necessary to rely

upon consent in other than written form because of the physical or emotional state of the patient.

- iii. Where emergency treatment is necessary and the patient is incapable of giving consent and no one is available who has authority to act on his behalf, consent is assumed.

In clinical investigation *primarily for the accumulation of scientific knowledge*.—

A. Adequate safeguards must be provided for the welfare, safety and comfort of the subject.

B. Consent, in writing, should be obtained from the subject, or from his legally authorized representative if the subject lacks the capacity to consent, following: (a) a disclosure of the fact that an investigational drug or procedure is to be used, (b) a reasonable explanation of the nature of the procedure to be used and risks to be expected, and (c) an offer to answer any inquiries concerning the drug or procedure.

C. Minors or mentally incompetent persons may be used as subjects only if:

i. The nature of the investigation is such that mentally competent adults would not be suitable subjects.

ii. Consent, in writing, is given by a legally authorized representative of the subject under circumstances in which an informed and prudent adult would reasonably be expected to volunteer himself or his child as a subject.

D. No person may be used as a subject against his will.

Laboratory Services

The following questions and answers are provided by the Judicial Council in response

to inquiries raised by a number of medical societies.

Q. A laboratory is owned by a physician who spends a small portion of his time directing and managing its financial and business affairs. The laboratory work is performed by technicians and directly supervised by a medical technologist with little or no participation by the physician-owner. The physician's name is used in connection with the laboratory in a manner to create the appearance that it is owned, operated and supervised by a doctor of medicine. Is the physician engaged in an unethical activity? Would it make any difference if he were not the owner, but merely received compensation for his time? Or if he were a partner with the supervising technologist or participated without receiving any compensation or share of the profits?

A. In each of the situations set forth above the physician would be guilty of deception and unethical conduct in misrepresenting or aiding the misrepresentation of laboratory services performed and supervised by a non-physician, as physician's services.

Q. A laboratory, owned, operated and supervised by a non-physician in accordance with state law, performs tests exclusively for physicians who receive the results and make their own medical interpretations. Is it permissible for physicians to utilize the services of these laboratories?

A. The physician's ethical responsibility is to provide his patients with high quality services. This includes services which he performs personally and those which he delegates to others. A physician should not utilize the services of any laboratory, irrespective of whether it is operated by a physician or non-physician, unless he has the utmost confidence in the quality of its services. He

(Continued on Page 976)





TABLETS

Equagesic[®]

(meprobamate and
ethoheptazine citrate with
aspirin)



Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.
Wyeth Laboratories Philadelphia, Pa.

Weighing on his mind, too

When pain evokes anxiety and tension, thereby heightening patient discomfort, a simple analgesic may only touch on part of the problem.

This single-prescription, non-narcotic product, however, usually provides effective analgesia *and* helps put the patient's mind at ease.

OPINIONS OF THE AMA JUDICIAL COUNCIL

(Continued from Page 973)

must always assume personal responsibility for the best interests of his patients. Medical judgment based upon inferior laboratory work is likewise inferior. Medical considerations, not cost, must be paramount when the physician chooses a laboratory. The physician who disregards quality as the primary criterion or who chooses a laboratory because it provides him with low cost laboratory services on which he charges the patient a profit, is derelict in not acting in the best interests of his patient. However, if reliable quality laboratory services are available at lower cost, the *patient* should have the benefit of the savings. As a professional man, the physician is entitled to fair compensation for his services. He is not engaged in a commercial enterprise and he should not make a markup, commission, or profit on the services rendered by others.

Use of Terms "Ethical" and "Unethical"

The Judicial Council has been asked to comment upon the use of the terms "ethical" and "unethical" as used in *Opinions and Reports* of the Judicial Council and resolutions of the House of Delegates of the American Medical Association.

Historically, the term "ethical" has been used in *Opinions and Reports* of the Judicial Council and in resolutions adopted by the House of Delegates to refer to matters involving (1) moral principles or practices; (2) customs and usages of the medical profession; and (3) matters of policy not necessarily involving issues of morality in the practice of medicine. The term "unethical" has been used to refer to conduct which fails to conform to these professional standards, customs and usages, or policies, as interpreted by the American Medical Association.

Unethical conduct involving *moral principles*, values and duties calls for disciplinary

action such as censure, suspension, or expulsion from medical society membership.

Failure to conform to the *customs and usages* of the medical profession may call for disciplinary action depending upon the particular circumstances involved, local attitudes, and how the conduct in question may reflect upon the dignity of and respect for the medical profession.

In matters strictly of a policy nature, a physician who disagrees with the position of the American Medical Association is entitled to freedom and protection in his point of view.

Associations Between Doctors of Medicine and Optometrists

Q. May optometrists be employed as ancillary personnel to assist ophthalmologists?

A. It is not unethical for an ophthalmologist to employ an optometrist as ancillary personnel to assist him provided the optometrist is identified to patients as an optometrist and not as a doctor of medicine. The ophthalmologist has an ethical responsibility to take affirmative measures to make sure that patients will not be given the impression that the optometrist is also a doctor of medicine.

Q. May a physician teach in a school of optometry?

A. Since optometry is not a cult, physicians may, in accord with the provisions of Resolution 107 adopted in June, 1966, by the House of Delegates, teach in recognized schools of optometry for the purpose of improving the quality of optometric education. The scope of this teaching may embrace subjects within the legitimate scope of optometry which are designed to prepare students to engage in optometry within the limits prescribed by law.

Charging Penalty for Over-Due Accounts

"Since the practice of medicine is a profession and not a business, the practices adopted by businesses are not necessarily suitable for professional practice.

"It is not in the best interest of the public or the profession to charge interest on an unpaid bill or note or to charge a penalty on fees for professional services not paid within a prescribed period of time nor is it proper to charge a patient a flat collection fee if it becomes necessary to refer the account to an agency for collection.

Participation by Physicians in Bank Card Programs

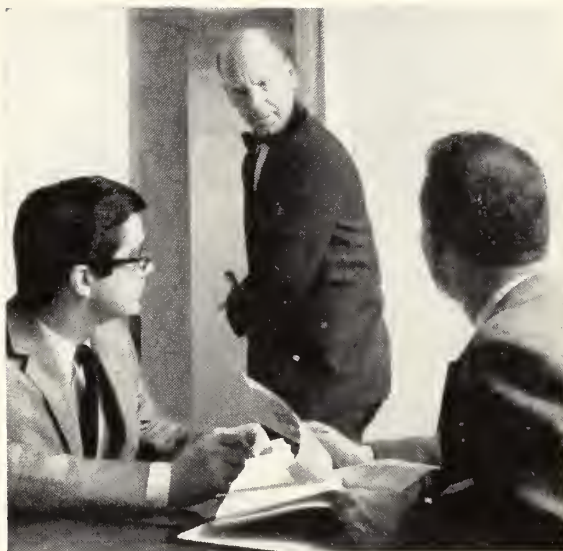
The growth and development of credit cards is burgeoning. A new form of card, the so-called *bank card*, is being widely introduced. Bank cards are issued without cost to the cardholder; they are acceptable at many more places than conventional credit cards; they are sponsored by large, reputable banks. They are an innovation in our economic system.

As these bank card plans have come into being, in all parts of the country, physicians have asked if they may ethically use bank cards as a form of payment for professional services. Some medical societies have said physicians may participate; others have said physicians may not.

The Judicial Council believes a uniformity of opinion is desirable. In matters of ethics it would seem indisputable that a general rule should be determined for the guidance of the profession, and that this rule should be implemented at local level.

The medical profession has officially recognized that it cannot dictate to patients how they shall finance their medical bills. It can and should, however, determine principles to guide its members in determining whether and how they may participate in any payment program.

If the bank card were merely a substitute for cash or check in the payment of bills, little



He leaves to make an urgent call But doesn't use the phone at all

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...soothes colicky pain with paregoric
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Parepectolin®

Each fluid ounce of creamy white suspension contains:
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Contains opium ($\frac{1}{4}$ grain) 15 mg. per fluid
ounce.
warning: may be habit forming
Pectin (2½ grains) 162 mg.
Kaolin (specially purified).... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three
times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

or no problem would be presented to physicians regarding their use; they would be merely a newly adopted medium of exchange. Bank cards, however, serve a twofold function: They are a convenience—a substitute for currency or check in the payment of indebtedness; and they are also a financing mechanism. Consequently, their indiscriminate use, especially the financing of larger medical bills through banks, could result in additional cost to patients. While the doctor's fee for medical care would not increase, the cost of financing payment of that fee through a third party would be imposed on the patient. Of course, patients may voluntarily elect to pay larger amounts in return for the convenience of a given program. Still, the medical profession has a responsibility to guard against patients being placed in untenable financial conditions because of overall medical care costs. That is why medicine has been in the forefront in encouraging prepayment and insurance programs to provide for the costs of medical services. It must,

therefore, maintain its position of safeguarding patients interests when considering new methods of financing personal indebtedness.

The Judicial Council is of the opinion that neither endorsement nor disapproval should be given to the bank card system at this time.

In June, 1965, the Judicial Council and the Council on Medical Service jointly agreed that any proposed plan for financing medical care or parts of medical care should be judged by the physician in the light of whether or not it might "result in advertising or solicitation of patients by physicians, profit to physicians for other than professional services, exploitation of the patient, or unnecessary increase in the cost of medical care."

Judged by these criteria, the Judicial Council is of the opinion, at this time, that physician participation in bank card programs is not per se unethical. It is of the opinion that physicians may ethically accept bank cards in the payment of current medical bills

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Assistant Professor of Psychiatry and Medical Director
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in lieu of cash or check, that is, as a medium of exchange.

The use of bank cards in financing medical fees must, however, be viewed with reserve at the present stage of their development. While patients may not be denied the right to determine matters of their personal budgeting, physicians must not encourage the use of this financing method if in operation it might compromise the ideals of the medical profession or add to the financial burden of patients.

In connection with physician participation in bank card programs, the Judicial Council recommends the following principles to be implemented and applied as necessary by the county medical society for the guidance of physicians as these programs develop.

1. The county medical society should be satisfied as to the financial and professional integrity of the plan. It should negotiate with the plan sponsors to insure that service charges to the physician are reasonable. It should insist that the plan be open to all physicians on the same terms and that it not exploit or capitalize on physicians' participation in the plan. It should advise the plan that the listing of physicians in directories of participating members is contrary to the ethics of the medical profession.
2. The individual physician may not, because of his participation, increase his fee for medical service rendered the patient. He may not use the plan to solicit patients. He may not encourage patients to use the plan. His position must be that he accepts the plan as a convenience to patients who desire to use it. Plaques or other devices indicating participation in the plan within the physician's office shall be kept to a discreet and dignified minimum. Plaques, signs, or other devices indicating such participation visible outside the physician's office are unacceptable.
3. The use of a bank card in connection with the payment of larger fees—which might

normally be paid to the physician in installments—is not to be encouraged. All members of the Association are expected to continue the traditional practice of permitting patients of limited means to pay relatively large fees in installments without interest or carrying charges. Out of respect for the dignity and traditions of the medical profession, the physician may not relieve himself of his obligations "to render service to humanity, reward or financial gain being a subordinate consideration."

Guidelines for Physicians in their Relations with the Communication Media

Many people, literate and well educated, do not possess a special knowledge of medicine. Medical books and journals are not always easily accessible or readily understandable.

Physicians are aware that patients' information concerning health and health education frequently comes from the daily or weekly newspaper. The press, together with popular magazines, radio, and television, are often the primary, and for many, the only source of information about medicine and health.

The public is eager to learn all it can of the most recent advances in the cure of diseases. It is anxious to learn about and put into effect the best methods of public hygiene and preventive medicine. The daily press and other communication media have correctly considered such subjects as news. It is in the public interest that this news be accurate and presented by spokesmen trained in medicine.

The American Medical Association is well aware that specific decisions regarding relations between physicians and the communications media must and should be determined at the community level by the local medical society and its membership. These guidelines are offered to the county medical society as a starting point and a reference to help them develop and improve press relations at the community level.

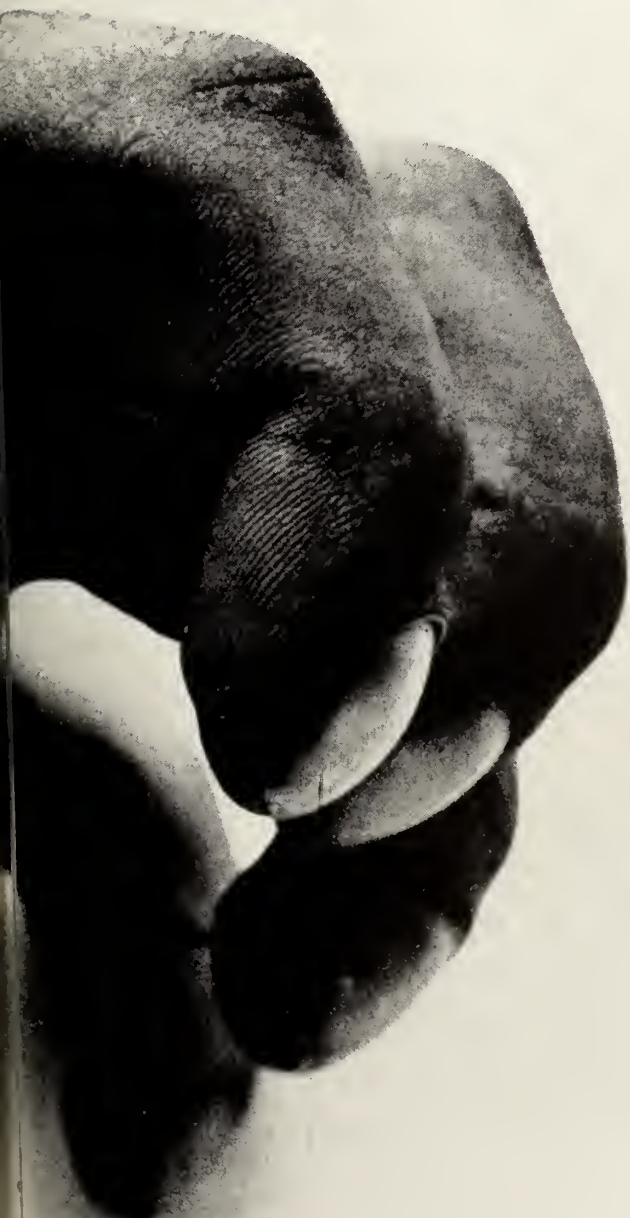
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controls infected inflammatory dermatoses that start from scratch



The "itch-scratch" cycle usually associated with inflammation often results in infected dermatoses because broken skin surfaces are particularly vulnerable to pathogenic bacteria.¹ To treat infected inflammatory dermatoses, Neo-Synalar Cream combines the most active topical corticosteroid with a highly reliable antibiotic generally reserved for topical application.

In Neo-Synalar, fluocinolone acetonide controls the inflammation and provides rapid relief from associated pruritus. At the same time, its antibacterial component—neomycin—combats superficial infection caused by many gram-positive and gram-negative bacilli² that often colonize and thrive on abraded skin.¹

A specially formulated vanishing cream base that is greaseless and odor free makes Neo-Synalar cosmetically appealing, and encourages greater patient cooperation.

controls the infection

stops the scratch

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Neomycin rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Neo-Synalar under certain conditions. **Availability:** Neo-Synalar Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

References: 1. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. 2. Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.

Neo-Synalar[®]
(fluocinolone acetonide-neomycin sulfate cream)
Cream

OPINIONS OF THE AMA JUDICIAL COUNCIL

(Continued from Page 979)

The following guidelines have been approved by the Judicial Council of the American Medical Association to aid in the smoother flow of accurate medical news from the medical profession to those who collect and disseminate such news.

* * *

I

Each medical society should appoint a communications committee, or designate a responsible individual or individuals, whose duty shall be to provide the communications media with accurate information on all medical matters of interest to the public. This information should be given freely. The communications committee may also serve in an advisory capacity to all communications media and to all physicians of its society in questions involving relationship with the media. To assist the media in obtaining information, medical societies may furnish the media with a list of names of physicians from whom authoritative information may be obtained, or a designated individual may serve as liaison between the media and the profession and furnish names of physicians to provide authoritative information when required.

These spokesmen may be quoted by name and title. This should not be considered by their colleagues as seeking publicity, since it is done in the best interest of the public and the profession. They may ethically provide appropriate information regarding medical and public health matters which have been discussed in technical papers or during medical meetings.

The officers, committee chairmen, and designated spokesmen of medical societies should be available at all times to bonafide representatives of the communication media in order that authentic information may be obtained as soon as possible.

II

Because certain news (1) is a part of the public record, or (2) is a matter of concern to civil authorities, it is readily available for publication. Physicians should cooperate with the press to insure that medical news of this sort is available more promptly and more accurately than would be possible without their assistance.

News in this category, known as news in the public domain, includes: births, deaths, accidents, and police cases.

The following information in the public domain can be made available without the patient's consent:

(a) Personal information: patient's name, address, age, sex, race, marital status, employer, occupation, name of parents in case of births, name of next-of-kin in case of deaths.

(b) Nature of accident:

Only general information regarding injuries will be released. This consists of the name of the injured portion of the body such as back injury, etc.

It may be stated that there are internal injuries. If the patient is unconscious when brought to the hospital, a statement to that effect may be made.

Statements regarding the circumstances surrounding shootings, knifings and poisonings are properly police matters and questions whether they were accident or otherwise should be referred to the appropriate authorities. A statement may be made to the effect that the patient was injured by a knife or other sharp instrument, but no statement may be made as to whether or not it was assault, accident, or self-inflicted.

A statement may be made that the patient received burns and the member of the body affected may be indicated.

No statement may be made that there was a suicide or attempted suicide.

No statement may be made to the effect

that intoxication or drug addiction was involved.

No statement may be made that moral turpitude was involved.

(c) Diagnosis and prognosis:

Inasmuch as a diagnosis may be made only by a physician and may depend upon X-ray and laboratory studies, no statement regarding diagnosis should be made except by or on behalf of the attending physician. For the same reason prognosis will be given only by the attending physician or at his direction.

(d) Patient's condition:

A statement may be made as to the general condition of the patient using the following classifications: minor injuries or similar general diagnosis, good, fair, serious, critical.

III

When information concerning a specific

patient is requested, the physician must obtain the consent of the patient or his authorized representative before releasing such knowledge. The patient's decision is final under the law. A physician may, within the limits of good taste, encourage the patient or his family to state the cause of illness, or the cause of death, when this information is requested by a bonafide representative of the press. Where a person of public interest is involved, and the release of information has been authorized, the physician may arrange for regular bulletins concerning the person. The ethical physician will use restraint and good judgment regarding the use of his name in connection with such published reports.

IV

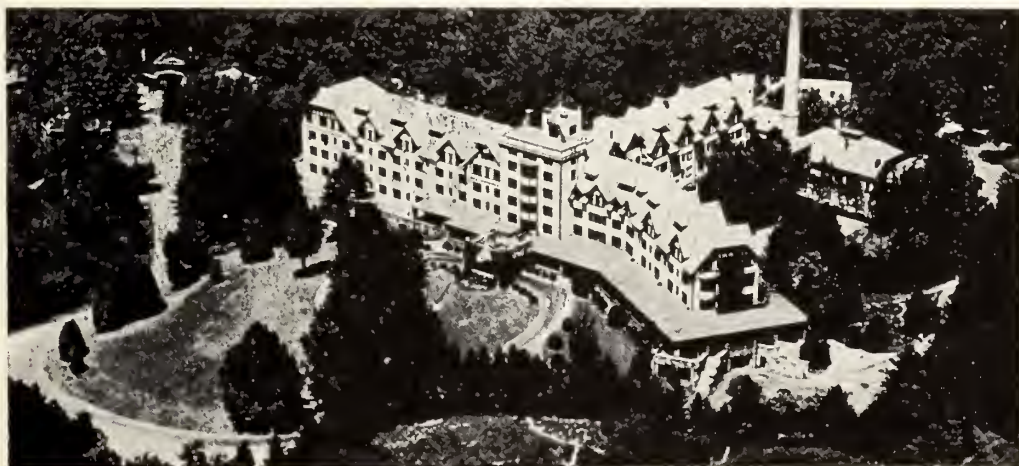
Publications of photographs of physicians, who appear before recognized medical organizations, either in the official program of the scientific meeting or before the public press in connection with such meeting, is

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Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

permissible. The use of photographs in the press when physicians are elected to office or when physicians are quoted by name on matters of general interest, not related to the care of a specific patient, is likewise permissible. Photographs of physicians in connection with civic or social affairs, not related to medical news or the care of patients, may be published unless the frequency of such photographs bespeaks self-exploitation. This applies also to magazine articles. Physicians should clear such publicity, whenever possible, with their county society.

V

The promise of radical cures or boasting of extraordinary skill or success is considered unethical by the medical profession because it is contrary to the best interest of the public.

VI

For purposes of clarity, the following principles should guide physicians who appear on TV or radio programs or who are interviewed in other media of public information, such as newspapers and magazines:

- (a) Doctors of medicine are expected to refrain from sponsoring products directly or by implication.
- (b) When introduced as a doctor on TV or radio programs, or quoted in an article as a physician in newspapers and magazines, such individual cannot escape the implication of representing the medical profession and his conduct should be in keeping with the high standards of the profession.
- (c) Sound judgment, good common sense and adherence to the Principles of Medical Ethics are expected of any physician when appearing on TV or radio programs, or in other media of public information, such as newspapers and magazines, in whatsoever capacity.

VII

Members of medical society speakers bureaus, because of the very nature of their assignments, may be interviewed or quoted by the communication media. This is not considered unethical conduct.

The members of these committees must be most circumspect and uphold the ideals of the medical profession.

VIII

At all times the doctor of medicine is expected to comply with the Principles of Medical Ethics. Section 10 of the Principles of Medical Ethics deals with relationships between physicians and the communications media. It says: "The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community." The Judicial Council construes Section 10 as encouraging physicians to work with the communications media as an integral and important part of the principle of upholding the responsibility of the physician to society as a whole.

It shall be the responsibility of each county society to see that these Principles are not violated.

IX

Doctors of medicine are ethically and legally required to protect the personal privacy and other legal rights of patients. The doctor-patient relationship and its confidential nature must be maintained. With these considerations in mind, the physician may assist the representatives of these media in every way possible.



The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—At a cost of nearly \$1 billion, more than six million older persons got hospital and medical benefits during the first six months of the medicare program.

Social Security Commissioner Robert M. Ball expressed satisfaction with the overall operations so far of the health insurance program for the elderly. But Ball warned of bed shortages in the nation's capital, in various New England states, and in most rural areas when a new medicare benefit of nursing home care went into effect Jan. 1. He estimated that for 50,000 to 60,000 beds would be needed for extended care in nursing homes.

The Commissioner recommended a number of changes in the program:

—He urged that medicare benefits, which apply to persons 65 or older, be extended to 1.3 million disabled persons.

—He said the major improvement needed in the Social Security program is an "across-the-board" increase in benefits. Over-all benefits to be paid out in 1966 will rise from \$21 billion in 1966 to \$25 billion in 1967, he noted. President Johnson has announced he will seek a boost of about 10 per cent in Social Security benefits in the next Congress.

Ball's report on the first six months of medicare included:

—About 2.5 million elderly persons re-

ceived free hospital care and 3.5 million benefited from medical services.

—Since medicare began July 1, 1966, hospital occupancy increased 5 per cent, as expected. Thirty per cent of all hospital beds were occupied by those 65 or older at the end of 1966.

—About 6,700 hospitals now are participating in medicare. About 250 hospitals were excluded because they did not meet minimum standards, and 75 hospitals because of racial discrimination.

—Payments to doctors and skilled medical personnel, such as radiologists, have taken too long.

—Overcrowding of hospitals in various "isolated" incidents.

—Almost all of 17.5 million persons who signed up for additional medical insurance at a premium of \$3 maintained their payments.

Seventeen hospitals in five states declared ineligible for federal funds because of failure to comply with provisions of the 1964 Civil Rights Act were granted public hearings by the Public Health Service in Alabama, Louisiana, Mississippi, South Carolina and Texas.

"Discriminatory practices found at the hospitals include the segregation of patients . . . an absence of negro physicians . . . and the segregation of training facilities," a PHS spokesman said.

Sen. George D. Aiken, R., Vt., proposed a nine-point program to liberalize benefits under the government's medicare plan for action by Congress. One would extend medicare drug coverage to prescriptions for old people whether or not associated with hospital confinement. A similar plan was included in a Senate-passed tax bill last summer but was killed in a Senate-House conference. Other Aiken proposals would eliminate deductible and co-insurance features, waiting periods and enrollment deadlines from the medicare plan, lower the 65 year age

requirement for women to 62, and permit payment of medical specialist fees customarily provided by hospitals.

* * *

The National Advisory Cancer Council reported that, although cancer is still on the increase, more people are being cured of it than ever before.

The report—titled “Progress against Cancer”—shows that 30 years ago there were 144,774 cancer deaths in the United States, a crude rate of 112.4 per 100,000 of the population. In 1967 an estimated 305,000 deaths will occur, bringing the rate up to 153 per 100,000, according to the report. On the other hand, there has been an improvement in the cure rate. In 1937, less than one in five cancer patients survived five years without evidence of disease, but currently about 35 per cent, or better than one in three are saved. There is good reason to believe, the report states, that this favorable trend will continue.

Intensive study of six types of cancer is recommended:

Cancer of the breast, which has shown little improvement in incidence or mortality for about 30 years; the lymphomas, one of which, Hodgkin's disease, has been cured in 40 per cent of cases in a localized stage; chronic leukemia and multiple myeloma, for which drug treatment should be greatly improved; lung cancer, which continues to increase, particularly in both men and women smokers; and uterine cancer, which has been significantly reduced and might be almost totally eradicated by early detection with the “Pap” smear.

* * *

Expenditures on prescription drug research and development reached a new high, but fewer new products actually reached the market in 1966 than during any single year on record.

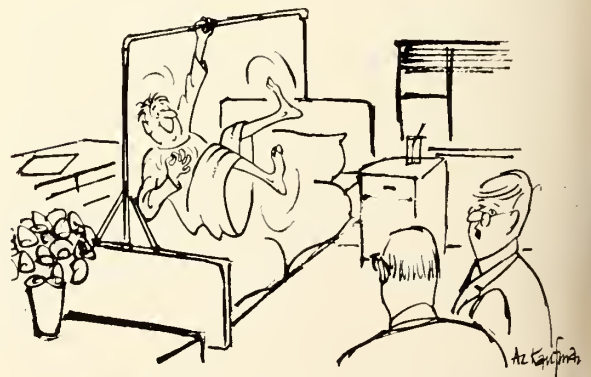
C. Joseph Stetler, president of the Pharmaceutical Manufacturers Association, said

that the situation was attributable to several factors, including difficulties encountered under federal drug regulations. He said that the 1962 federal drug amendments had necessitated increasingly lengthy, costly periods for manufacturers to develop technical information required by the government. Stetler added that more time also has been required by the Food and Drug Administration for processing applications.

Total research and development expenditures during 1966 were estimated by Stetler at about \$400 million. He said that only 11 basic new products had been marketed in the year, compared with 23 in 1965, 17 in 1964, 18 in 1963, 28 in 1962, and 41 in 1961. The peak year was 1959 when 63 new products were introduced.

A PMA survey shows that a principal focus of the million-dollar-a-day search by industry for new pharmaceuticals is on drugs acting on the central nervous system and sense organs. These include sedatives, stimulants, tranquilizers and analgesics.

Stetler said that such drugs accounted for \$37.1 million or 19 per cent of the \$194.7 million spent in 1965 on applied research and development by 42 of the nation's largest prescription drug firms.



“Well, so much for the simian transplant.”

Reprinted from *The New Physician*



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Alabama Department of Public Health



THE HOSPITAL AND SAFETY

Clay H. Dean, Director

Bureau of Health Facilities Construction

Alabama Department of Public Health

People are not fireproof and they cannot be made fireproof. They are also subject to hysteria, require oxygen to live, bruise easily, bleed when lacerated, remain complacent about danger, and are firmly convinced that "it cannot happen to me." Many of these characteristics are magnified when the person is sick, and certainly they are unable to protect themselves when they are helpless. When a person is at home, we can say that safety is the responsibility of him and his family; but when a person enters a public building or institution, such as a hospital or nursing home, his safety becomes the responsibility of those in charge of the institution.

This places a very grave responsibility on hospital authorities, government officials, fire department personnel, and others interested in safety to protect this non-fireproof accident prone person who is sure that "it cannot happen to him." An additional hazard results in the fact that many of us are actually less careful in a public building where the lives of others and our own are at stake than we are at home where our responsibility is essentially an individual matter: a patient or visitor smokes in bed and sets the mattress on

fire; a patient under an oxygen tent lights a pipe—it happened not far from here; someone tosses a lighted cigarette in a well stocked waste basket; other careless things happen. Whose responsibility is it? Patient safety is the responsibility of the hospital authority, along with government officials, and the fire prevention bureau.

But wait a minute. The individual visitor or patient is not the only hazard. What about the hospital authorities? We know better, but we still create some hazards. What about the ether and cyclopropane stored with oxygen and nitrous oxide in a room with boxes piled against the vent? What about those coats of wax on the operating room floor? What about the fan blowing on the fuse box? What about all that combustible "equipment?" stored in the stairwell? Sure, it is easier to leave that extra bed in the corridor than it is to take it back to the store room. Furniture placed at the end of the corridor blocking the metal exit door? A big exhaust fan to cool several floors installed on a stairwell landing and stair doors wedged open? All these things have happened and I have seen them myself. Fortunately, they did not all result in a fire.

So, we are human too—just like the visitor and patient. We make our own job harder. It seems as though we just have to make

Presented at the Conference on Fire Safety in Hospitals and Nursing Homes, Druid City Hospital, Tuscaloosa, Alabama, November 10, 1966.

things worse before we can start making them better. Perhaps the axiom is true: "Learn from the mistakes of others. You cannot live long enough to make them all yourself." And sometimes, after one mistake, we do not get a second chance. After a long series of mistakes, observations, tests, experience, research, and effort by a great many people working together and separately, a four point safety program has been developed to combat our human tendencies and to make us non-fireproof individuals almost as safe as if we were fireproof. These four points are as follows:

1. Build safety into every building—as safe as we know how to build.
2. Maintain safety in everything we do.
3. Educate visitors, patients, and employees on safety for that time that cannot happen but so often does.
4. Prepare a disaster plan and train all personnel to carry it out so everybody will know what to do.

Build Safety. Building codes, licensure regulations, and construction standards, etc. were all prepared with two purposes in mind: primarily to protect life and property. What is also important is that they make our job of achieving safety a lot easier. So it costs a little more to build according to the codes. Have you tried to put a dollar value on the lives of 125 people, or 74 people, or even one person? Yet quite often we receive requests to waive a safety requirement because wood paneling looks so good, because putting the stairwell at the end of the corridor just ruins the architectural scheme, or because the incombustible materials cost more and "we just cannot afford it." Here are a few basic principles to follow in building safety:

1. Use non-combustible materials even in one-story buildings. Presently, the codes say such materials must be used in constructing multi-story buildings. Let's do it in one story buildings also. Avoid the use of combustible materials for finishes such as walls and ceilings or anywhere else in the building.

2. Provide protected exits at the extreme ends of all levels of the facility. Give every person at least two ways to get out.
3. Provide extra protection in hazardous areas.
4. Be sure that all corridors are protected so as to provide safe passage to the exits.
5. Compartmentalize the structure to prevent spread of smoke as well as fire.
6. All electrical equipment and installations must be of adequate size, installed according to the National Electric Code, and be Underwriters Labeled Laboratories approved.
7. All mechanical equipment must be in accordance with the codes and located in protected areas—to protect the rest of the building.
8. Provide means of removing static electricity and spark preventing equipment in all areas where explosive and flammable gases are used.
9. Do not use corridors to move air.
10. Confine the fire in the room where it starts. Do not forget that fire can spread over the wall as well as through it. Walls must run to the underside of the floor above—do not stop at the ceiling line.
11. Enclose all vertical shafts and install sprinklers in hazardous shafts.
12. Provide separation between floors.
13. Provide fire alarm system within the building and to the local fire department.
14. Install fire detection devices and sprinkler equipment in hazardous areas.

So we build safety into our buildings. We have plenty of money at the beginning and can "go first class." But later on we need a new ceiling in the corridor. Mineral tile or incombustible tile costs about 21¢ per square foot and fibre tile costs about 13¢ per foot. Just think of all the money we can save on that remodeling job if we conveniently for-

(Continued on Page 992)

One 'Ornade' Spansule Capsule works all day (or all night) to make your patient with a cold a lot more comfortable.

'Ornade', the unique oral nasal decongestant with a drying agent, a decongestant and an antihistamine in the ideal dosage form

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The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. **Contraindications:** Patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal obstruction, or bladder neck obstruction. **Precautions:** Use with caution in the presence of hypertension, hyperthyroidism, or coronary artery disease; and, in patients who may operate vehicles or machinery, warn of possible drowsiness. **Note:** Since the iodine in isopropamide iodide may alter PBI test results and will suppress ¹³¹I uptake, it is suggested that 'Ornade' be discontinued one week before these tests. **Side effects:** Drowsiness; excessive dryness of nose, throat, or mouth; nervousness; or insomnia may occur rarely, but are usually mild and transitory. Other known possible side effects of the individual ingredients are: nausea, vomiting, diarrhea, rash, dizziness, fatigue, tightness of chest, abdominal pain, irritability, tachycardia, headache, and difficulty in urination.

Smith Kline & French Laboratories 

(Continued from Page 990)

get the safety of ourselves and of others. Is a life worth 8¢ a square foot? Fibre tile is cheaper but it also actively spreads the fire at the same time it adds to the fire. All too often we find that un-authorized remodeling has actually changed an originally fire safe, fire resistant building into a fire hazard—just to save a few dollars. It is vital—as vital as your life—to never lower the fire safety standards of a building.

Maintain Safety. A fire can occur in a fire-proof building. Several years ago, approximately 125 persons lost their lives in the fire-proof Winecoff Hotel in Atlanta. Yes, it was then and is now a fireproof building. It just was not maintained in a fire-safe manner. Combustible finishes and furnishings were used and those things, combined with the absence of enclosed stairways separating floors, cost those lives. Every time we have a choice between a combustible material and a non-combustible material let's spend a dime more and go safely. Here are a few pointers to remember in maintaining safety:

1. Keep corridors free and clear of all obstructions. Incidentally, the local fire prevention bureau visited the State Office Building a few weeks ago and removed obstructions in the exit corridors.
2. Never store anything in an exit stairway.
3. Use non-combustible fabrics whenever possible.
4. Be a good housekeeper even in store-rooms, shops, closets, mechanical rooms, and all those places where the visitor and sometime personnel never go.
5. Never leave a coating over conductive flooring. Test conductive flooring and equipment every month.
6. Keep fire extinguishers and other fire fighting equipment in good working order.
7. Inspect electrical and mechanical equipment regularly.

8. Never store flammable gases with oxygen or nitrous oxide.
9. Exercise extreme care with all explosive and flammable materials.
10. Maintain those maintenance shops as you would the entrance lobby.
11. Avoid the use of highly flammable decorations.
12. Do not be a pack rat. Never let combustible items accumulate in storerooms, crawl space, attics, concealed spaces, or anywhere else.
13. If a door is supposed to be closed—do not prop it open.
14. Periodically check alarm systems and all emergency equipment. If it will not work when you need it, it is useless.

Maintaining safety can be summed up in a few words: good housekeeping and common sense. Do not put it off until tomorrow. The fire or other disaster may occur tonight.

Educate for Safety. It may be assumed that all of you attending this conference are already sold on the necessity for educating yourselves, your visitors, employees, and patients for safety. Let's be sure that we take our education home with us and practice what we have learned and what we preach. And let's also carry the message to those that really need it—those that did not come.

Probably the main idea to get across in safety education is one of a continuing process. Personnel are transient; the visitor stays only a little while; patients are usually gone within a week, and may not ever come back. About the moment we think we have done our safety education job, we suddenly find that over half of our pupils have left and we have a bunch that "came in late." Be safety conscious. Get the message to every person who enters the building as soon as possible. Repeat safety instructions. Sometimes even you and I forget things and, being human, we occasionally do not think to use what we

have learned under stress. Safety education and knowledge must become as automatic with us as breathing.

Disaster Planning. We have a safe building; we have maintained its safety; and we have educated for safety. Can we rest here? Absolutely not. All too often the first reaction to danger is panic and hysteria. Someone must keep his head and do the right thing in a calm, methodical fashion. Opening the door may be a simple procedure under normal conditions, but it can become almost impossible during moments of stress and hysteria. You cannot depend upon the visitors and patients to save themselves. You and your hospital personnel must do it.

Disaster planning is of two types: disaster within the hospital and disaster outside the hospital. In the former instance, we must get people out and care for them, and in the

latter we must get them in and care for them.

It is essential that every hospital have a workable evacuation plan. Every hospital employee must know exactly what he or she is to do and every patient must know what is expected of them and how they can help. When the alarm sounds, the reaction must be automatic and positive. There will be no time to look up the disaster plan to find out what to do. The plan must be well prepared to cover everybody and every emergency. It must be learned and rehearsed until the proper action and reaction is as automatic as breathing. Let's not forget that just removing the patient from danger is not enough. The plan must include getting the patient to a safe place where hospital care can and will be continued.

Now a few words about the other side of the coin. Disasters occur outside the hos-



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...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity¹ or side effects^{2,3} and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: *J. Pediat.* 38:41 (Jan.) 1951.
2. Bradley, J. E.: *Mod. Med.* 20:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: *Am. J. Obst. & Gynec.* 65:311 (Feb.) 1953.



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pital and can suddenly create a sharply increased demand for services. It need not be a nuclear disaster. A train hit a school bus near Scottsboro. A train wreck occurred at Woodstock. Tornadoes happen several times a year in Alabama (one recently struck Moundville). A hurricane on the coast or other disasters may bring as many patients to the hospital in a few minutes as the hospital normally receives in a week or more. Will this create a disaster in the hospital? Not if the hospital has a well thought out and rehearsed disaster plan. Otherwise, the hospital may experience chaos and loss of life in the very place to which we look for saving life.

In planning for outside disaster the hospital faces a real problem in having on hand the necessary equipment and supplies to meet the sudden demand. What 100-bed hospital keeps an extra 100 beds on hand at all times? I do not know of any. Do you? Well, help is in sight. The Packaged Disaster Hospital Program is now being re-oriented toward natural disasters that can and might happen almost any day. It is now proposed that the PDH be located in the hospital under hospital management for use by the hospital in both natural and war time disaster situations. Both the equipment and supplies will be available for use. Of course, there will be some restrictions and accountability, but the hospital that participates in the PDH program will have on hand the equipment and supplies that it will need to meet disaster situations.

In summary, we must accept our responsibility for the safety and welfare of those who have placed themselves in our care. By following the four point program of building safety, maintaining safety, educating for safety, and planning for disaster, hospitals and nursing homes and other medical facilities throughout Alabama can be havens of refuge *all the time* and not *except in emergencies*.

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director

Current Morbidity Statistics

1966

	Nov.	Dec.	*E. E.
			Dec.
Tuberculosis	85	175	95
Syphilis	98	99	104
Gonorrhea	381	518	262
Chancroid	0	0	1
Typhoid fever	0	0	1
Undulant fever	0	0	0
Amebic dysentery	3	2	2
Scarlet fever & strep. throat	509	564	90
Diphtheria	1	2	5
Whooping cough	7	0	5
Meningitis	9	6	10
Tularemia	0	0	0
Tetanus	3	4	1
Polio myelitis	0	0	1
Encephalitis	0	0	0
Smallpox	0	0	0
Measles	42	89	60
Chickenpox	20	55	53
Mumps	32	75	21
Infectious hepatitis	29	36	25
Typhus fever	2	1	0
Malaria	1	1	0
Cancer	619	609	459
Pellagra	0	0	0
Rheumatic fever	9	12	13
Rheumatic heart	26	38	24
Influenza	72	150	119
Pneumonia	272	276	233
Rabies—Human cases	0	1	0
Pos. animal heads	0	0	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph.D., Director

December 1966

Examination for Intestinal Parasites	1,017
Examination for Malaria	0
Salmonella & Shigella	
(blood-feces-urine-food)	391
Examination for tubercle bacilli	3,135
Examination for gonococci	1,658
Serological test for syphilis	23,975
FTA	18
Darkfield	0
Brucella	4
General Bacteriology (culture for isolation and confirmation)	9
Staphylococcus (cultures for isolation and confirmation)	271
Examinations for diphtheria	59
Streptococci examinations	2,356
Mycology	16
Agglutinations	20
Vincent's infection	1
Complement fixation tests	123
Test for Phenylketonuria (PKU)	8,869
Cytology	588
Water examinations	2,157
Milk and dairy products examinations	3,774
Sea food examinations	158
Examination for Negri bodies (smears & animal inoculation)	259
Virology	8
Rh Factor	517
Miscellaneous	384
TOTAL	49,769

Bureau of Vital Statistics

PROVISIONAL BIRTH AND DEATH STATISTICS AND COMPARATIVE DATA

Ralph W. Roberts, M. S., Director

SEPTEMBER 1966

OCTOBER 1966

Live Births Deaths Causes of Death	Number Registered During September 1966			Rates* (Annual Basis)		
	Total	White	Non- White	1966	1965	1964
Live Births	5,995	3,906	2,089	20.7	22.5	24.3
Deaths	2,423	1,647	776	8.4	8.5	8.5
Fetal Deaths	134	57	77	21.9	19.8	17.8
Infant Deaths						
under one month	103	58	45	17.2	17.5	20.3
under one year	140	79	61	23.4	22.5	23.7
Maternal Deaths	3		3	4.9	6.1	16.1
Causes of Death						
Tuberculosis, 001-019	16	5	11	5.5	7.0	5.4
Syphilis, 020-029	6	2	4	2.1	1.7	1.4
Dysentery, 045-048					0.3	0.7
Diphtheria, 055					0.3	0.4
Whooping cough, 056						0.7
Meningococcal infections, 057	1		1	0.3		1.1
Poliomyelitis, 080, 081						0.4
Measles, 085						
Malignant neoplasms, 140-205	348	271	77	120.2	125.8	124.7
Diabetes mellitus, 260	51	34	17	17.6	9.1	10.4
Pellagra, 281						
Vascular lesions of central nervous system, 330-334	340	229	111	117.5	110.5	119.3
Rheumatic fever, 400-402	1		1	0.3		0.4
Diseases of the heart, 410-443	852	625	227	294.4	287.0	262.6
Hypertension with heart disease, 440-443	121	56	65	41.8	33.6	33.3
Diseases of the arteries, 450-456	43	32	11	14.9	19.6	15.8
Influenza, 480-483	1		1	0.3	0.7	0.4
Pneumonia, all forms, 490-493	57	28	29	19.7	15.0	18.3
Bronchitis, 500-502	4	3	1	1.4	1.7	1.4
Appendicitis, 550-553	7	5	2	2.4	0.3	2.1
Intestinal obstruction and hernia, 560, 561, 570	12	9	3	4.1	4.9	5.7
Gastro-enteritis and colitis, under 2, 571.0, 764	7	2	5	2.4	1.7	4.3
Cirrhosis of liver, 581	13	12	1	4.5	6.6	3.6
Diseases of pregnancy and childbirth, 640-689	3		3	4.9	6.1	10.1
Congenital malformations, 750-759	18	15	3	3.0	4.5	4.6
Immaturity at birth, 774-776	33	15	18	5.5	5.0	5.6
Accidents, total, 800-962	176	126	50	60.8	64.7	55.9
Motor vehicle accidents, 810-835, 960	101	77	24	34.9	37.1	28.3
All other defined causes	339	198	141	117.1	129.3	137.9
Ill-defined and unknown causes, 780-793, 795	95	36	59	32.8	43.7	51.2

Live Births Deaths Causes of Death	Number Registered During October 1966			Rates* (Annual Basis)		
	Total	White	Non- White	1966	1965	1964
Live Births	5,650	3,753	1,897	18.9	20.9	23.8
Deaths	2,838	1,931	907	9.5	9.1	9.2
Fetal Deaths	131	57	74	22.7	17.0	20.6
Infant Deaths—						
under one month	104	64	40	18.4	17.3	23.1
under one year	140	78	62	24.8	26.1	31.8
Maternal Deaths	2		2	3.5	3.2	1.4
Causes of Death						
Tuberculosis, 001-019	35	19	16	11.7	7.1	7.3
Syphilis, 020-029					0.3	1.4
Dysentery, 045-048	2	2		0.7		0.7
Diphtheria, 055					0.3	0.3
Whooping cough, 056						
Meningococcal infections, 057	2	2		0.7	0.3	1.0
Poliomyelitis, 080,081						
Measles, 085					0.3	0.3
Malignant neoplasms, 140-205	414	308	106	138.4	123.8	129.7
Diabetes mellitus, 260	43	31	12	14.4	12.5	16.6
Pellagra, 281					0.3	
Vascular lesions of central nervous system, 330-334	402	267	135	134.4	131.3	132.4
Rheumatic fever, 400-402	2	2		0.7		
Diseases of the heart, 410-443	935	677	258	312.6	306.5	294.7
Hypertension with heart disease, 440-443	106	47	59	35.4	40.3	33.6
Diseases of the arteries, 450-456	74	45	29	24.7	21.6	20.1
Influenza, 480-483	2	2		0.7		
Pneumonia, all forms, 490-493	53	34	19	17.7	26.0	23.6
Bronchitis, 500-502	3	3		1.0	0.3	1.7
Appendicitis, 550-553	2		2	0.7		0.3
Intestinal obstruction and hernia, 560, 561, 570	11	6	5	3.7	4.4	5.9
Gastro-enteritis and colitis, under 2, 571.0, 764	9		9	3.0	3.0	3.5
Cirrhosis of liver, 581	17	13	4	6.4	7.8	6.2
Diseases of pregnancy and childbirth, 640-689	2		2	3.5	3.2	1.4
Congenital malformations, 750-759	19	17	2	3.4	4.0	3.8
Immaturity at birth, 774-776	32	20	12	5.7	6.5	6.3
Accidents, total, 800-962	219	148	71	73.2	58.2	62.4
Motor vehicle accidents, 810-835, 960	119	76	43	39.8	36.5	31.6
All other defined causes	422	273	149	141.1	129.2	136.3
Ill-defined and unknown causes, 780-793, 795	138	62	76	46.1	52.4	50.6

*Rates: Birth and death—per 1,000 population

Infant deaths—per 1,000 live births

Fetal deaths—per 1,000 deliveries

Maternal deaths—per 10,000 deliveries

Deaths from specified causes—per 100,000 population

Rates: Birth and death—per 1,000 population

Infant deaths—per 1,000 live births

Fetal deaths—per 1,000 deliveries

Maternal deaths—per 10,000 deliveries

Deaths from specified causes—per 100,000 population

MODERN MEDICINE TO EXTEND NEW PHYSICIAN SAMPLING SERVICE THROUGH NEXT YEAR

Modern Medicine has announced plans to extend its new Professional Sample Service through 1967.

The new service—a first in medical publishing—is based on using an established medical journal as a vehicle for matching individual physician requests for drug samples with manufacturers' supply.

Modern Medicine initiated the service on a three-issue test basis this year, inserting PSS request forms in the August 15, September 26 and November 7 issues. The PSS forms listed sample offers for advertisers who wished to participate. The only requirement was that the product must be advertised in the issue.

To order individual samples, physician-readers check products desired, and sign and return the request form to *Modern Medicine*. Requests are computer tabulated, and participating manufacturers are sent either ready-to-use labels or sample delivery cards to use in filling requests.

"The service apparently struck a 'hot button' with the medical profession," says Burton D. Cohen, Associate Publisher, "and prompted our decision to extend the program into next year. We've received tremendous response from doctors, as well as enthusiastic encouragement from participating pharmaceutical firms."

The 1967 PSS schedule calls for listings in the January 30, March 13, April 24, June 5, July 31, September 11 and October 23 issues of *Modern Medicine*.

Additional features of the service next year will include: (1) a frequency discount, (2) availability of duplicate sets of labels or cards, (3) availability of manufacturers labels or cards, pre-sorted alphabetically and geo-

graphically by specialty groups, and (4) the option of receiving returns on magnetic tape, programmed to fit manufacturers' requirements.

Also, the March 13 issue of *Modern Medicine* will be used for testing the inclusion of medical literature. "While our desire is to maintain the service for strictly professional samples, we recognize that this excludes some advertisers," says Cohen. "Therefore, to accommodate those who have asked to use the service, we will use the March 13 issue as a test of inclusion of other offers."

The service premiered in the August 15, 1966, issue, and *Modern Medicine* received requests for samples from 28,972 individual physicians for a total of 113,800 drug samples. Returns from the September 26 issue are even more dramatic, with requests from more than 34,000 physicians, and additional returns still being received.

Announcement to continue the service into 1967 marks a pioneer step in medical publishing, and the first time the nation's 200,000 physicians have been able to request individual drug samples through a medical journal.

"The use of an established and professionally oriented medical journal as the vehicle for this service is both an efficient and natural combination," says Cohen. "Our research and readership studies show *Modern Medicine* doctor-readers are 'thinking medicine' when they read the journal. The new service is one more service that we provide within our total purpose of keeping the physician current on his profession.

"The concept, in effect, opens up a totally new channel of communication and sample distribution between physician and manu-

(Continued on Page 1001)

when congestion is complicated by sulfa-susceptible
bacterial invaders in the
upper respiratory tract...



re-enforce your decongestant therapy

prescribe economical **Trisulfaminic[®]**

Each tablet contains: Triaminic[®] 25 mg. (phenylpropanolamine hydrochloride 12.5 mg., pheniramine maleate 6.25 mg., pyrilamine maleate 6.25 mg.); Trisulfapyrimidines, U.S.P. 0.5 Gm. (sulfadiazine 0.167 Gm., sulfamerazine 0.167 Gm., sulfamethazine 0.167 Gm.)

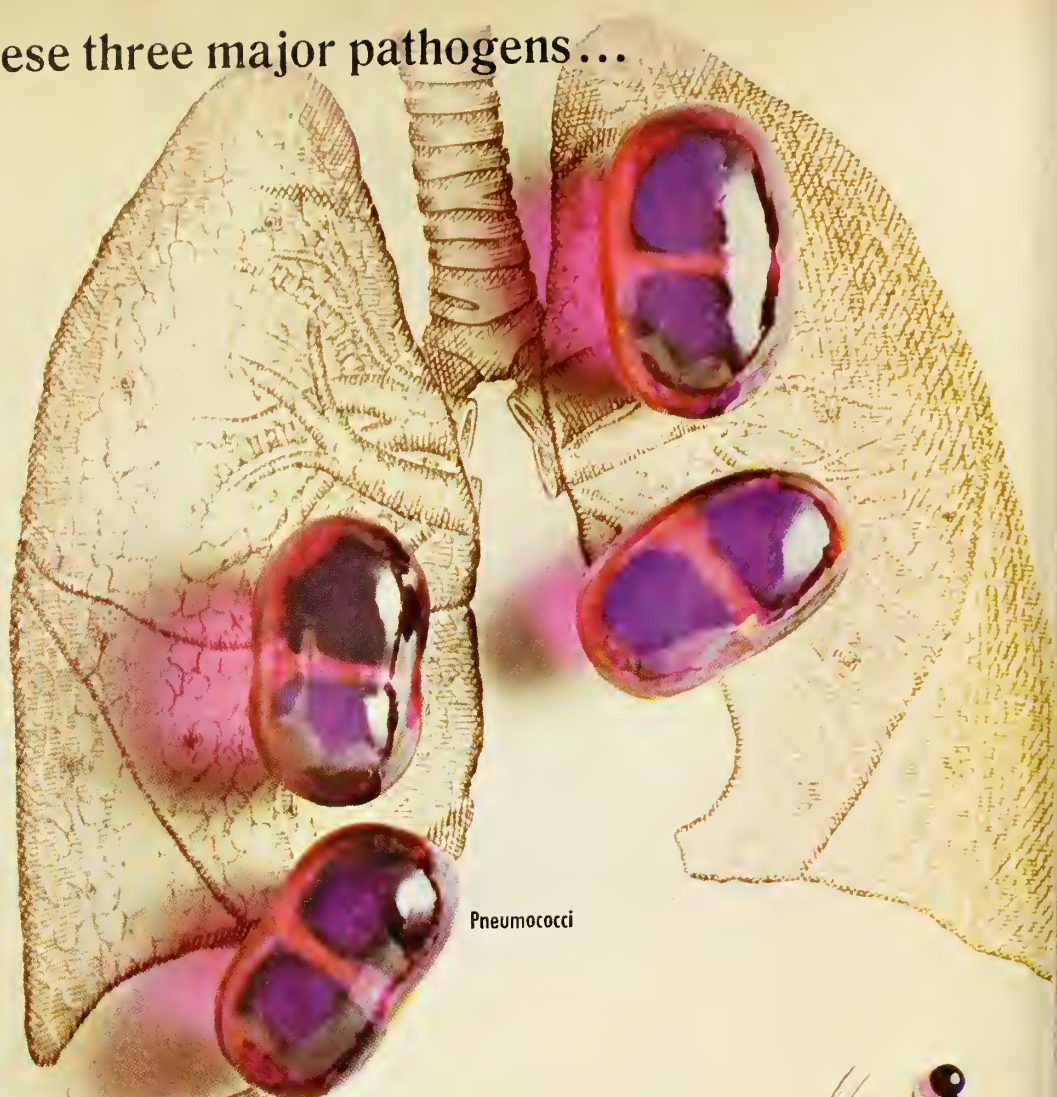
PHARMACOLOGY: Triaminic decongests and promotes drainage of nasal and paranasal passages, and prevents any further histamine-induced damage; the triple sulfonamides inhibit susceptible bacterial invaders. **INDICATIONS:** For congestion and infection of the upper respiratory tract caused by sulfa-susceptible organisms. **DOSAGE:** Adults: 2 to 4 tablets initially, followed by 2 tablets every 6 hours. Medication should be continued until patient has been afebrile for 3 days. **ADVANTAGES:** The advantages of Trisulfaminic in upper respiratory infections are: freedom from narcotics or alcohol; therapeutic reliability; safety; economy; ease of administration; freedom from potential sensitization to broad-spectrum antibiotics which may be reserved for lower respiratory or other infections caused by susceptible organisms. **CONTRAINDICATIONS:** Contraindicated in sulfonamide and antihistamine sensitivity, impaired renal function, pregnancy approaching term, and in premature infants and newborn infants during the first month of life. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction.

WARNING: Use only after careful evaluation in patients with liver or renal damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions with administration of sulfonamides. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed periodically. Sulfonamide therapy may potentiate the hypoglycemic action of sulfonylureas. **PRECAUTIONS:** Use with caution in patients with histories of significant allergy or asthma. Assure an adequate fluid intake. Because the antihistamines may cause drowsiness of varying degree, warn patients about activities requiring alertness such as driving a car or operating dangerous machinery. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease and diabetes. **ADVERSE REACTIONS:** As in all sulfonamide therapy, the following reactions may occur: headache, nausea, vomiting, diarrhea, icterus, hepatitis, pancreatitis, urticaria, rash, fever, cyanosis, hematuria, crystalluria, proteinuria, blood dyscrasias, petechiae, purpura, neuropathy and injection of the conjunctiva and sclera. If

one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. **PACKAGE INFORMATION:** Trisulfaminic Tablets: Supplied in bottles of 100 tablets. **CAUTION:** Federal law prohibits dispensing without prescription.

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Against these three major pathogens...



Pneumococci

Penicillin-Sensitive
Staphylococci



Beta-Hemolytic
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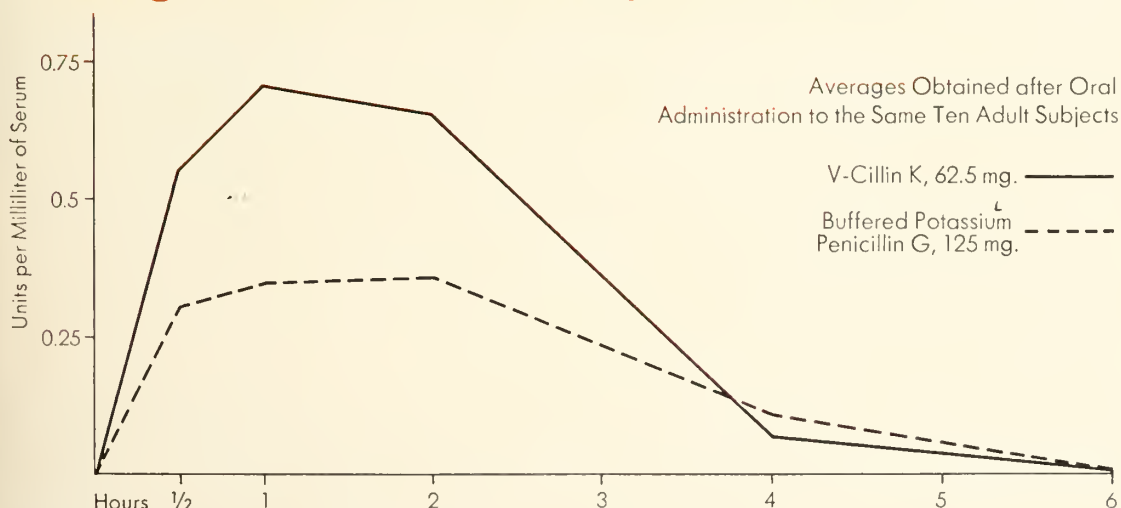
V-Cillin K[®] provides unexcelled oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive)		Streptococcus, Group A		Diplococcus Pneumoniae	
	MIC (mcg./ml.) Median	Range	MIC (mcg./ml.) Median	Range	MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M. New England J. Med. 269 1019, 1963.

with high blood levels, even in the presence of food

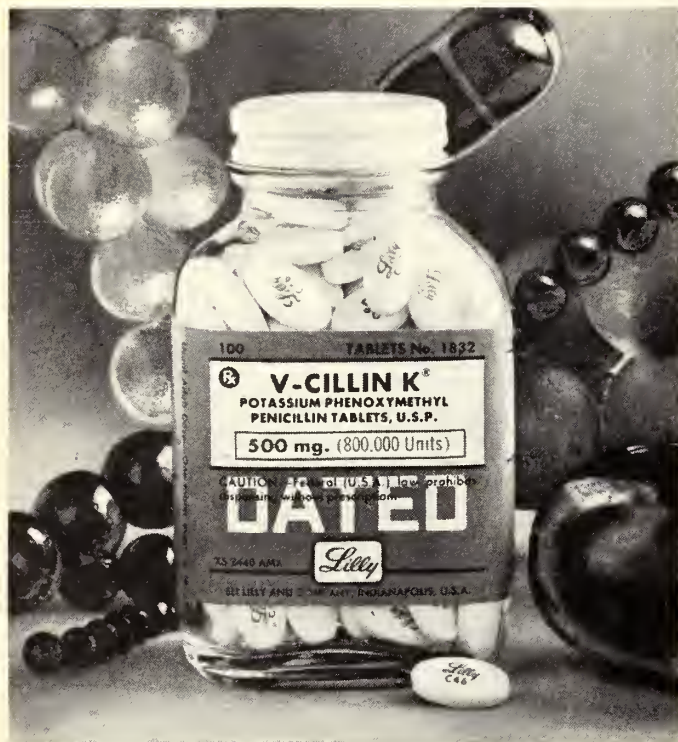


Adopted from Griffith, R. S., and Block, H. R. Current Ther. Res., 6 253, 1964.

V-Cillin K[®]  700157
Potassium Phenoxyethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in

those who have previously demonstrated sensitivity to penicillin. If severe hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness, and other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs. Relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the growth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated septicemia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units orally or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderate severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of the eye should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) in bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.



MODERN MEDICINE TO EXTEND SAMPLING SERVICE

(Continued from Page 996)

facturer," says Cohen. "The selective nature of the service insures the doctor will receive only those samples he needs and will use.

"From the advertisers' viewpoint, the fact the physician is personally requesting a sample means the service puts samples into the hands of only his best prospects. These are physicians who from the start register a high degree of interest and are likely to prescribe the product.

"Distribution, therefore, is to a prime audience and achieved at less cost than direct mailing samples to the entire physician universe."

Product listings in the *Modern Medicine* PSS request form are free to advertisers who wish to participate, and all products listed carry page numbers of advertisements for those products in that issue of *Modern Medicine*. Participants pay only 30 cents per returned physician request.

Returns are computer tabulated, and within approximately two to three weeks from date of receipt of the bulk of requests, participating pharmaceutical companies receive a set of printed gummed labels, heat transfers, or detailman's sample delivery cards pre-sorted and printed ready for recording and shipment. All labels (or cards) are broken down geographically and alphabetically for further ease in processing and use, and duplicate galley listings are provided for record keeping.

Modern Medicine has also prepared an analysis of the 28,972 physician-reader responses to the new service to provide advertisers with a profile of doctor-reader responses. The analysis is broken down by age, specialty or type of practice, principal employer, state and region.

Copies of the analysis are available on request from *Modern Medicine*.

Noise Pollution A Health Hazard

Noise pollution—or unwanted sound—has only recently been considered a community hazard. Population studies now suggest that hearing loss, formerly thought to be a hazard of aviators and boilermakers, occurs with age after lifetime exposure to noise at the community level. That severe noise exposure causes socially incapacitating hearing loss is well accepted. What has passed unnoticed is that many noise levels encountered in the community exceed standards found injurious in industry. In the community, the noise-pollution problem is just beginning, for noise in any machine is related to power output, a quantity that is growing as rapidly in the home as in industry or on the street corner. Although in both industry and in the United States population women lose less hearing than would be expected from data derived from men, the sex difference is slight in noise-free populations. Community noise exposure is often above maximum standards for industry. A saving quality has been that it is compared to an eight-hour period in industry. As the power use of both home and street increases, steps must be taken to limit the noise output. Otherwise, total exposure will exceed industrial standards, standards that rely on regular audiograms to prevent severe hearing loss. Community planners should give special attention to noise hazards where people congregate. Many areas of the community, such as subways and other forms of transport, could achieve large reductions in noise with careful engineering. Public concern must be developed to achieve a reduction in community noise hazards. To reduce noise levels in the kitchen and on the street will first require the educated demands of the consumer. (J. D. Dougherty, M. D., and O. L. Welsh, Ed. D.: "Community noise and hearing loss," *The New England Journal of Medicine*, 6 October 1966).

AMA SUPPORTS NURSING SALARY RAISE

A "significant improvement in the income of the registered nurse" was called for by the House of Delegates of the American Medical Association at its recent bi-annual session.

The House agreed with the Board of Trustees and AMA's Committee on Nursing which supports the need for a significant improvement in the income of the registered nurse; recognizing that there will be considerable variation in compensation depending upon the prevailing local conditions, training, experience, and degree of delegated responsibility.

The House also voted to continue to support in principle all current nationally approved educational programs for nurses. It noted that the American Nurses' Association and the National League for Nursing have called for nursing education to take place in colleges and universities.

Support for the RN salary raise was also voiced in an editorial in the Dec. 12 issue of *The AMA News*, a weekly newspaper published by the American Medical Association. The editorial said:

"Overworked and underpaid nurses have been given support for better wages and working conditions by the House of Delegates of the AMA.

"The House voted as the Clinical Convention just ended to 'support the need for a significant improvement in the income of the registered nurse.'

"The House noted that the American Nurses' Assn. in June adopted a national salary goal of \$6,500 for registered nurses beginning practice. But the House agreed with the report of the Board of Trustees and the Committee on Nursing which questioned such a national salary goal, establishing a

minimum rate of compensation for the entire country.

"A salary for registered nurses should be controlled by economics and the supply or demand in the part of the country where the nurse is employed. There is considerable variation in compensation depending upon the prevailing local conditions, training, experience, and the degree of delegated responsibility.

"The ANA's goal was adopted in the belief that low salaries seriously hamper efforts to recruit nurses and to keep nurses in practice. In an interview printed in the Nov. 28 issue of *The AMA News*, Jo Eleanor Elliott, RN, president of ANA, said many nurses with current licenses are not working because it is not economically feasible.

"As long as these inactive nurses keep their licenses current, there is a potential to alleviate the nurse shortage,' she said. 'The ANA is making a major effort to attract these inactive RNs back into nursing. But they must be given the proper motivation—including better wages and working conditions—to make it worth their while.'

"She also said that generally nurses have gotten little support from physicians in the attempt to get better wages. Now, she and her profession have the official backing of the medical profession for a 'significant improvement' in their incomes.

"Physicians can help make the AMA's statement meaningful by investigating the wages and working conditions of registered nurses in their communities. Physicians can use their influence in their communities to better the conditions of important members

(Continued on Page 1004)

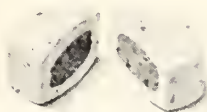
To "catch" your patient's cold
so others won't...



the speckled tablet with a core of difference

SUSTAINED-ACTION

Naldecon®



Each tablet contains:	Outer layer (immediate action)	Core (sustained action)
phenylpropanolamine HCl	20 mg	20 mg
phenylephrine HCl	5 mg	5 mg
phenyltoloxamine citrate	7.5 mg	7.5 mg
chlorpheniramine maleate	2.5 mg	2.5 mg

Each teaspoonful (5 ml) of syrup contains the equivalent of one-half tablet

For rapid and sustained symptomatic relief of colds and minor upper respiratory infections.

Prescribing Information: For complete information consult Official Package Circular. **Effectiveness:** Clinical experience has shown this formulation to be effective in relieving the symptoms of nasal congestion associated with pollen allergy or minor upper respiratory infections (common cold, nasopharyngitis, acute and chronic sinusitis). **Precautions:** Do not drive or operate machinery while taking Naldecon. Exceed dose or give to children under 6 years old only on advice of physician. **Contraindications:** Severe hypertension, hyperthyroidism, serious organic heart disease or severe diabetes mellitus. **Usual Dose:** Adults: One tablet morning, midafternoon and evening. Naldecon tablets are scored and may be broken for fractional dosage, without loss of sustained-action effect. **Supplied:** Bottles of 50 and 500 tablets. Syrup, 1 pt. bottle.

BRISTOL

Bristol Laboratories
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AMA SUPPORTS NURSING SALARY RAISE

(Continued from Page 1002)

of the medical team. And, physicians after all, appreciate the value of nurses more than does any other group."

In other actions the House urged, "appropriate utilization of retired physicians and

inactive nurses to help meet the increased demand for health care services."

The House said that more than 8,500 MDs are now retired and that more than 2,600 women physicians are not now in the practice of medicine, and that thousands of registered nurses are inactive. The House said AMA should call the attention of medical societies to the appropriate use of these persons.

Why Bed Rest?

Children need not be confined to bed for minor illness—a child who wants to be up should be allowed to be up. Enforced bed rest has many dangers and only a few advantages. So contends Dr. Hugh Jolly, a British physician.

Although it is traditional for children with a rise in temperature to be put to bed, he insists that there is no scientific evidence for this practice if the child wishes to be up. One recent study of children with respiratory infections, for example, showed no difference in the duration of fever or of illness between one group kept in bed and another that was allowed to be up. In fact, it appeared that some of those kept in bed exerted themselves more than those who were allowed up.

Dr. Jolly said that the child confined to bed against his will is unlikely to stay at rest and cites his own experience. His seven-year-old daughter was refused permission to return home on the fourth day after an appendectomy on the basis that she required bed rest for proper healing of the scar. That same evening he entered the children's ward where his daughter had just won a competition to see who could bounce up highest off the bed.

Even more serious illnesses rarely require bed rest. Strapping and immobilization frequently delay spontaneous cure of wounds. When records of 734 children treated as day patients were analyzed, repair of inguinal hernia was found to be the commonest opera-

tion. By the time these children had returned to the hospital on the fifth postoperative day, about three-quarters of them had removed their own sutures; there were no complications.

A review of studies on bed rest in the treatment of rheumatic fever indicates that "early ambulation, under careful supervision, is harmless and may be of advantage to the child," Dr. Jolly pointed out.

On the other hand, "most children who feel ill enough to take to their beds should be allowed to stay in bed," he continued. Only a few like to stay in bed when they could be up because they feel more secure there.

There undoubtedly are a few occasions when a child has to be confined to bed against his wishes, but these are uncommon. The child known to be incubating poliomyelitis and the child—usually a boy—with transitory arthritis of the hip should be treated by bed rest.

Dr. Jolly also challenges the belief that a child needs a specific number of hours' sleep each night. "It is a fallacy which leads to much needless parental anxiety. The only reason for wishing a healthy child to go to sleep is to give his parents their well-earned rest. To parents who complain that their child won't go to sleep and only wants to play, one must explain that a child learns by play, and that this is the young child's equivalent of school."—*Lancet*, Sept. 3, pp. 541-542.

Vast Increase In Medical Education Is Goal

The new president of the Association of American Medical Colleges has warned that only through a major expansion of medical education can the profession provide the services required under new federal health care legislation.

At a press conference shortly after his election to the presidency, Dr. William N. Hubbard of Ann Arbor, Mich., noted that the United States is faced with a "revolution of rising expectations in medical care . . . The days of charity patients and double standard medicine for rich and poor are ending and the demand for doctors is increasing."

Dr. Hubbard, who is dean of the University of Michigan Medical School, said about 8,000 doctors are graduating from medical schools each year and another 1,500 are graduating

from foreign schools. However, 11,000 are needed each year to keep up with the demand.

To make up this deficit, he said, the "real key" is a big expansion of this country's medical schools. This will mean more funds for teachers, more funds for physical facilities.

The problem to which Dr. Hubbard addressed himself has already come to the forefront of legislative debate and action in Alabama. Provisions were made to increase the number of students from the University of Alabama Medical College from 80 to 100, and a special committee was authorized to make a study to ascertain the feasibility of a new medical school in this state.

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**A patient centered
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Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

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Relief for Bursitis

Local injections of *Celestone*[®] *Soluspan*[®] Injection into toes and metatarsal joints and other measures to provide relief of pressure "offers a highly successful treatment for bursitis and related inflammatory disorders of the feet," reports Dr. Donald Altman of Manhattan State Hospital, New York City.

Bursitis involving the toes "is even more distressing to working patients than bursitis in the arm or shoulder where immobilization may not necessarily mean time lost from work," the podiatrist pointed out.

"Relief by intra-articular or intrabursal injection of a corticosteroid is probably the most appropriate anti-inflammatory therapeutic measure available today. The corticosteroid remains localized around the inflammatory areas without inducing any systemic effect," he added.

"Since ordering the patient to bed in order to rest the affected area is not always possible and means time lost from work, the use of a rapid-acting, long-lasting corticosteroid is the best procedure."

Celestone Soluspan Injection is a unique anti-rheumatic preparation that incorporates rapidly absorbed betamethasone disodium phosphate, which acts almost immediately, and slowly absorbed betamethasone acetate, which provides prolonged relief.

Fifty-one patients ranging in age from 21 to 84 years, who were suffering from bursitis of the toes and joints, were injected with this corticosteroid compound. Therapy consisted of single injections in some cases and injections for several days in others, depending on the condition of the patient.

"Relief in almost all instances was prompt and lasting," Dr. Altman said. Forty-six of the 51 patients had good to excellent results, "from marked diminution of pain and swelling to complete or almost complete eradication of their problems."

The effectiveness of *Celestone Soluspan* Injection was demonstrated dramatically in

an actress who was scheduled to perform on stage that evening. She had an acute inflammatory attack of bursitis in the first metatarsal joint of her left foot. She could barely walk the few steps to the doctor's office. "Pain, tenderness and swelling were reduced and relieved within 3 to 5 hours with one injection of the preparation, and she was able to walk on-stage and perform that same evening," he explained.

"Since the toes are subject to fairly constant pressure from shoes and the trauma of weight bearing, successful treatment suggests relief of these sources of irritation and pressure." In conclusion, Dr. Altman said that the results in this study "indicate that *Celestone Soluspan* [Injection] is a highly effective preparation for rapid and prolonged relief of the condition."—*J. Am. Podiatry Assn.*, September, pp. 408-410.

Overly Aggressive Coronary Prone?

After a five-year study, a team of cardiologists, psychologists, and statisticians say it is so, that excessive drive, aggressiveness, and preoccupation with competitive activity may carry a penalty of heart disease. The investigators found that 94 of 133 men who had heart attacks had these personality traits. In relating these to the physiological characteristics associated with heart disease, it was found that of the 133 men who had heart attacks, the more aggressive types—called Type A personalities—had two to three times as much heart disease as Type B personalities—those of a more relaxed and easy-going nature even—when both had the same levels of blood cholesterol. Type A persons had one and a half to six times as much heart disease as Type B individuals with similar levels of blood lipids—fatty substances—and two and a half times as much heart disease as Type B's with comparable blood pressure. ("Overly aggressive personality in men shown to be related to heart disease," in *Modern Medicine*, 10 October 1966).

When thiazide
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BLOOD
PRESSURE
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Establish and
maintain
early, more
decisive control
of blood pressure

If blood pressure won't stay down despite initial therapy—
if complaints of headache, fatigue or dizziness are often
repeated—it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine plus cryptenamine—a
rational, comprehensive therapy to help establish and maintain
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The cryptenamine in DIUTENSEN-R helps improve normal vaso-
motor reflexes while the thiazide and reserpine components
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amine lowers pressoreceptor reflex thresholds (which may
be abnormally high in hypertension)—“resets” pressoreceptors
for action at more nearly normotensive levels.

Early, more decisive control with DIUTENSEN-R helps secure con-
tinuing benefits—may reduce or even obviate the need for poorly
tolerated drugs later in therapy.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals. However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars.

Side effects and precautions: The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon. DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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DIUTENSEN-R®

Cryptenamine 1.0 mg • Methyclothiazide 2.5 mg Reserpine 0.1 mg

HELP ELIMINATE MEASLES

AMA ASKS PHYSICIANS

Physicians and local medical societies recently were asked to lead the drive to eliminate measles in this country.

Ridding the nation of measles is possible in the foreseeable future, said a statement of the American Medical Association's Council on Environmental and Public Health in the November 21 Journal of the AMA.

"Now is the time for concerted action," the Council said, "and physicians should take the initiative before another winter-spring season of greatest (measles) incidence arrives."

Most measles-susceptible children can be immunized by their family's physician, but cooperative community-action programs may also be needed, the statement said.

Why all the concern about measles?

Although measles is a common childhood disease (90 per cent of American adults have had measles), it is much more serious than many people realize.

"Part of the problem has been a general apathy to measles," the Council statement said. "Adults may have forgotten the three to six days of peak discomfort of the uncomplicated illness that they experienced as children."

"They may have forgotten the childhood friends who died, the bitter experience of families whose children suffered from complications such as pneumonia or encephalitis, and those left with residual deafness or mental defects."

Measles vaccine has been available since spring, 1963. Although measles prevention is now readily possible, it "has been further impeded by the development of several different recommended vaccines and vaccination procedures and by the multiplicity of (vaccination) schedules," the Council said.

The Council made these recommendations:

—All children should be immunized when approximately 12 months old.

—Eventually, all measles-susceptible children should be immunized, but the first effort should be to protect infants and those entering kindergarten and the first two grades of elementary school.

—Older children should be immunized only on an individual basis, and not as part of a mass vaccination program. An exception, the Council said, is when large numbers are measles-susceptible, as in isolated geographic regions.

For help in planning a community immunization program, the AMA council recommended the "Seminar Service on Disease Prevention Through Immunization," a program of the U. S. Public Health Service's Communicable Disease Center. The seminars are presented to medical societies in various areas.

"Campaigns should eventually be directed toward protecting all susceptible children," the statement said. "However, in bringing the disease under rapid control, early attention to those approximately one year of age and susceptibles entering kindergarten or in the first two grades of elementary school can be expected to preclude community spread of measles and lead to its virtual and prompt eradication."

The AMA council's statement on measles immunization is a preliminary response to discussions at a recent Symposium on Immunization, sponsored jointly by the AMA and the Communicable Disease Center. The reports of the symposium are to be published later, together with the response and a statement of the Council.



ALABAMA MEDICAL POLITICAL ACTION COMMITTEE
POST OFFICE BOX 51 MONTGOMERY, ALABAMA 36101

CHAIRMAN

E. B. GLENN, M. D.
1023 S. 20TH STREET
BIRMINGHAM, ALABAMA

SECRETARY-TREASURER

GROVER C. MURCHISON, JR., M. D.
1100 E. FAIRVIEW AVENUE
MONTGOMERY, ALABAMA

Dear Doctor:

In the very near future you will write a check covering your medical association dues for 1967. The check will be somewhat larger than in previous years. Dues for membership in the American Medical Association were increased \$25; there was a like increase in the membership dues of the Medical Association of the State of Alabama.

This fact may cause you to look with disfavor on making a \$35 contribution to the Alabama Medical Political Action Committee (ALAPAC) for 1967. But before you say no to ALAPAC, would you please give consideration to the following facts:

On November 8, 1966, in the general elections, LBJ and his Great Society were given a resounding setback at the polls. When the 90th Congress convened, it was obvious that the conservatives were back in control. How did this come about? You may be interested to know that the various state PAC organizations participated in more than 150 congressional races in 1966, and in 83 per cent of those races the PAC-supported candidates were elected.

And what about closer to home? Last Spring ALAPAC decided to support a candidate for lieutenant governor. The candidate, Albert Brewer, received our full support in recognition of his assistance in health legislation and his awareness of the problems we face. Our judgment was justified by the appointment of a Senate Health Committee by Lt. Gov. Brewer which will insure fair consideration of our legislative programs during this administration.

If this record doesn't make an ALAPAC believer out of you, then nothing will.

Sincerely,

E. B. Glenn, M.D.
Chairman, ALAPAC

Visiting Hours Changed

As a part of a continuing program to provide patients with the finest service and hospital care, visiting hours at the University of Alabama Hospitals and Clinics will be changed effective January 2, 1967.

Beginning January 2, 1967, new visiting hours for all patients will be from 11:00 a. m. to 1:00 p. m. and from 6:00 p. m. to 8:00 p. m. Maternity patients 11:00 a. m. to 1:00 p. m. and 7:00 p. m. to 8:30 p. m.

For the welfare of the patient, the number of visitors will be limited to no more than two persons per patient at any one time. Visitor passes can be obtained at the Information Desk in the lobby of the University Hospital.

More and more hospitals throughout the state have begun to alter visiting hours and regulations both at the request of patients and physicians.

The University of Alabama Hospitals and Clinics have been experiencing a high level of occupancy in recent years. Patients are being admitted throughout Alabama and the Southeast for treatment of the more complicated illnesses which require a full schedule of treatment, diagnostic testing and rehabilitation so essential to the rapid recovery of the patient. This fact combined with the number of visitors on the patient units at various times has led to a close examination of visiting hour privileges and the adoption of the new visiting policy.

Hospital officials have expressed confidence that the citizens of Jefferson County and the statewide community will lend their full support and cooperation in observance of the new visiting policy designed for the benefit of the patient.

INDEX TO ADVERTISERS

Abbott Laboratories	908, 909, 910
Alabama Bottlers	893
ALAPAC	1009
Ames Company, Inc.	924
Appalachian Hall	983
Bristol Laboratories	1003
Burroughs Wellcome	889
DuPont	941, 942, 943
Ciba	921
Dorsey	957, 958, 959, 960, 997
Durr Surgical Supply	965
Geigy Pharmaceuticals	916, 917
Highland Hospital	978
Hill Crest Hospital	1005
Hynson, Westcott & Dunning, Inc.	879
Lederle Laboratories	946, 947, 948, 949, 967
Eli Lilly & Company	1st cover, 890, 891, 892, 902, 903, 934, 998, 999, 1000
Wm. S. Merrell Company	954, 955
Neisler Laboratories	1007
Parke Davis & Company, Inc.	2nd Cover
Parkwood Hospital	951
Peachtree Hospital	961
Pitman-Moore	928, 929
Wm. P. Poythress & Company	885
Riker Laboratories, Inc.	897
A. H. Robins Company	969, 970
Roche Laboratories	4th Cover, 922, 923
J. B. Roerig & Company	882, 883
Wm. H. Rorer, Inc.	962, 963, 977, 993
Searle	944, 945
Smith, Kline & French	991
Syntex Laboratories	886, 887, 980, 981
Winthrop Laboratories	881
Wyeth Laboratories	3rd Cover, 894, 895, 974, 975, 987, 988

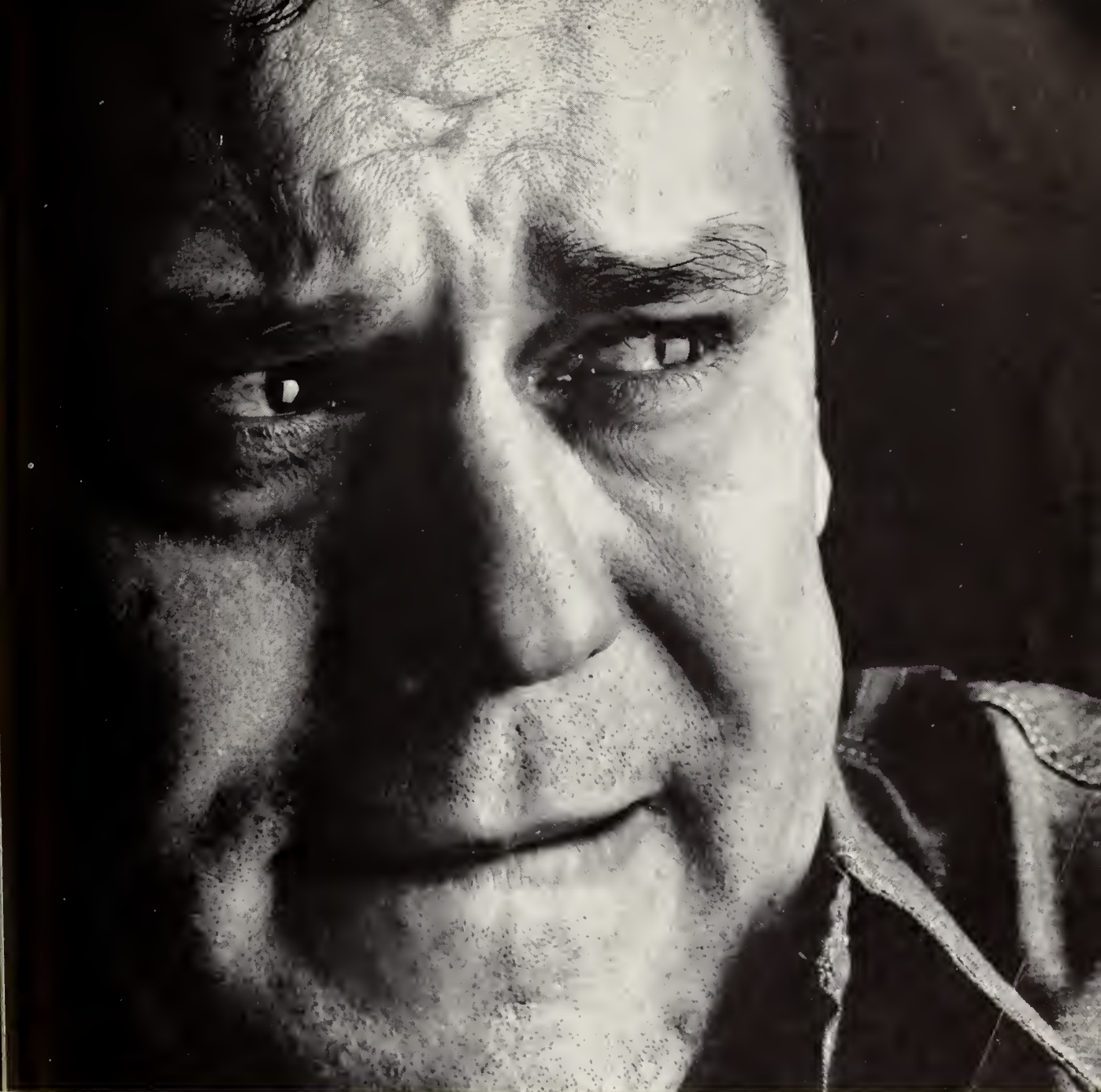


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Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin-allergy may occur. Measures for treating anaphylaxis should be readily available: epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; anti-

histamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β -hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

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Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazard-

ous procedures until correct maintenance dosage is established. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal. Periodic blood counts and liver function tests advisable in long term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged over dosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

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IN THIS ISSUE

- Stroke Mechanism In*
Carotid Occlusive Disease 1077
- The Epidemiology of Carotid Stenosis 1081*
- Successful Transuterine,*
Intraperitoneal Fetal Transfusion 1093

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Medical Association of the State of Alabama

Volume 36 • March, 1967 • No. 9

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price \$5.00 Per Year

..... \$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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CONTENTS

President's Page	1015
The Woman's Auxiliary	1022
Editorial Comment	1026
New Horizon in Diagnosis of Stroke	1026
Some Reasons Why You Should—	
Support your County Medical Society	
Support your State Medical Association	
Support your American Medical Association	1027
The Jew and Alcohol: An Unexplained Oddity	1029
Dangerous Trend Seen in Malpractice Cases	1032
Alabama Ophthalmologist Opposes Hart Bill	1048
Around the State	1053
1967 Officers of County Medical Societies	1053
Vital Statistics	1056
NASA in Action	1061
Woman's Auxiliary Convention Program	1067
Scientific Section	
Stroke Mechanism in Carotid Occlusive Disease, J. Garber Galbraith, M. D., Birmingham	1077
The Epidemiology of Carotid Stenosis, James H. Halsey, Jr., M. D., Sherman C. Raffel, Ph. D., and Theodore D. Lampton, M. D., Birmingham	1081
Maternal and Child Health	1093
Successful Transuterine, Intraperitoneal Fetal Transfusion—Report of a Case, George Cassady, M. D., and William Brakefield, M. D., Birmingham	1093
Report on First Congress on Socio-Economics	1097
Association Forum	1105
Transactions of the Called Meeting of November 6, 1966	1105
Medicine's PR Problems	1114
Alabama Department of Public Health	1130
The Role of Primary Prevention in Public Health, E. G. McGavran, M. D., M. P. H., Chapel Hill, North Carolina	1130
The Month in Washington	1140
Traffic Safety-Action Needed Now	1146
Scientific Data Lacking On Cancer "Vac-cine"	1155
Conference on Narcotics Studies Liaison of Medicine, Law	1156

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President's Page

On The Regional Medical Programs And Our Profession In Alabama

Apparently, physicians in Alabama have not fully understood the Regional Medical Program as it is envisioned in Alabama. The majority of those interrogated retain the concept implied in the original DeBakey Report. Dr. DeBakey's original report indicated that in designated regions there would be a central medical complex to which would be referred problems in the area of Heart, Cancer and Stroke. This concept is entirely erroneous as far as the interpretation and planning of the responsible group in the State of Alabama is concerned.

The interpretation and planning in Alabama is directed toward *decentralization* of Regional Programs to the community level. Our goal is to establish in appropriate communities, units of high competence, staffed by full time superior personnel from the University of Alabama Medical Center. These full time people are to assist the physicians of the respective centers in the application of the most recent advances in the fields of Heart, Cancer and Stroke problems. This approach should eliminate the "Time Lag" between acquisition and application of newer knowledge and techniques to an irreducible minimum. This, after all, is the stated purpose of the program as requested by President Johnson. Such an approach would appear to be much more effective than the centralized approach originally suggested by the DeBakey Committee. The basic tenet of the planning in Alabama is to retain patients in facilities in or near their own community, under the continuing care of their personal physician, aided when requested by highly specialized consultants from the Medi-



Dr. J. O. Finney

cal Center, available on a twenty-four hour basis. Such an arrangement should result in benefit to both the practicing physician and his patients, with a minimum of federal interference. This would also meet the demand of President Johnson to promptly apply therapeutic advances to the sick wherever they may be. Credit for this interpretation and planned approach to the Regional Program Act must be given to Dr. Tinsley Harrison and Dr. T. Joseph Reeves of our Medical Center in Birmingham. Dr. Reeves is the Chairman of the Advisory Committee for the Regional Medical Programs in Alabama.

If the program as planned in Alabama is to attain fruition, there must be trained suf-

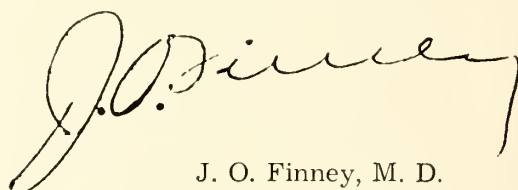
ficient medical and paramedical personnel to serve full time in the community facilities. Fortunately, the University of Alabama Medical Center was *one of the six* institutions in the United States chosen to develop a Cardiovascular Training Center to train personnel for performance in Regional Medical Programs. This designation again points to the high esteem in which the faculty of our medical school is held. Funds for the brick and mortar of this training center must be derived from federal, state, local and private sources. It is the duty of the Medical Association of Alabama and its individual members to aid the Medical Center in every manner possible to assure that ours is the most outstanding Cardiovascular Training Center in the entire United States.

The Medical Association of the State of Alabama stands on the threshold of greatness. We have been given the opportunity to

demonstrate to the rest of the country a method through which we can establish highly effective regional programs within the framework of individual community facilities and at the same time preserve, without significant interference, our greatly prized patient-physician relationship.

For ourselves and those who are to join our profession in the future we must give full support to the Alabama concept of the Regional Medical Program and the Cardiovascular Training Center.

Sincerely yours,



J. O. Finney, M. D.
President

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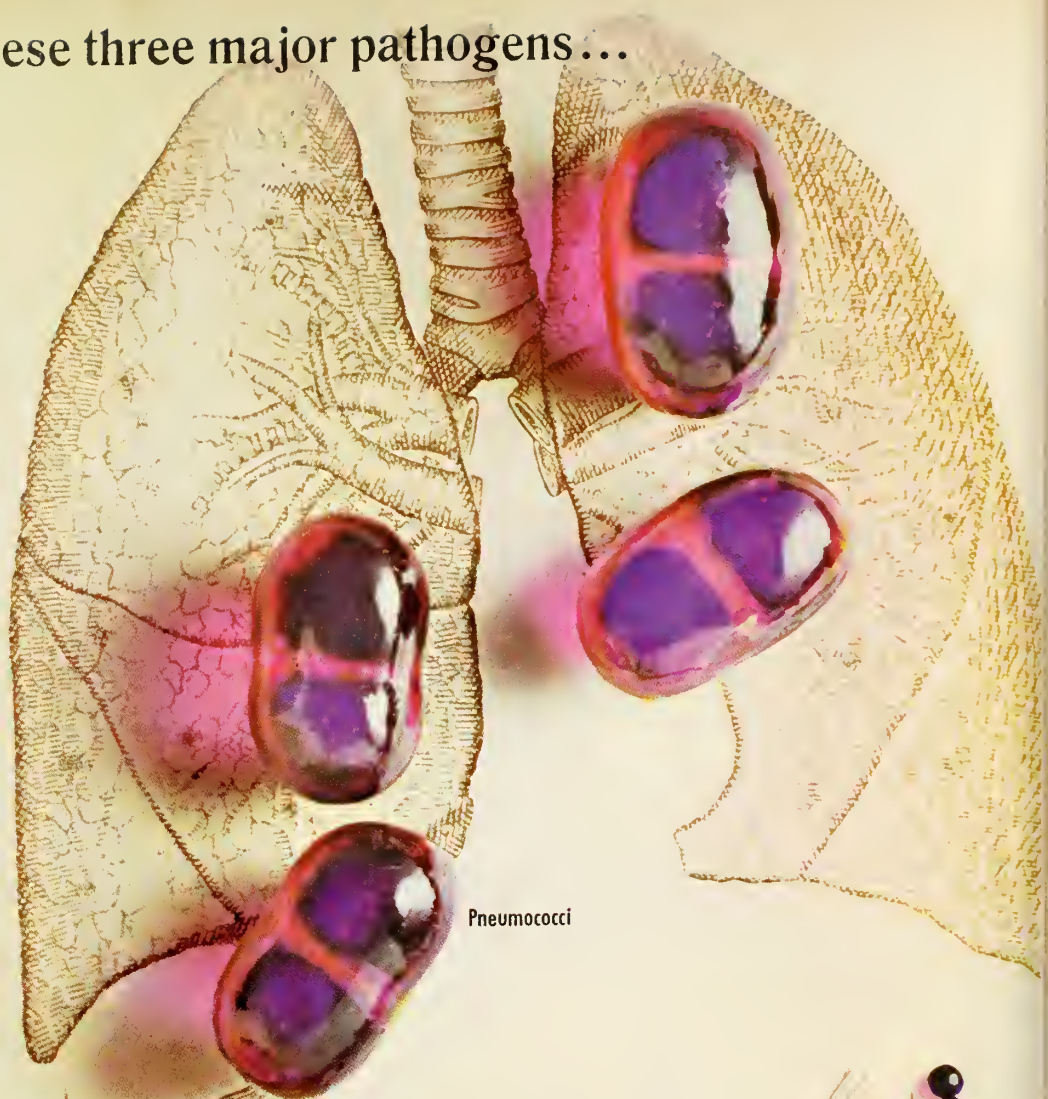
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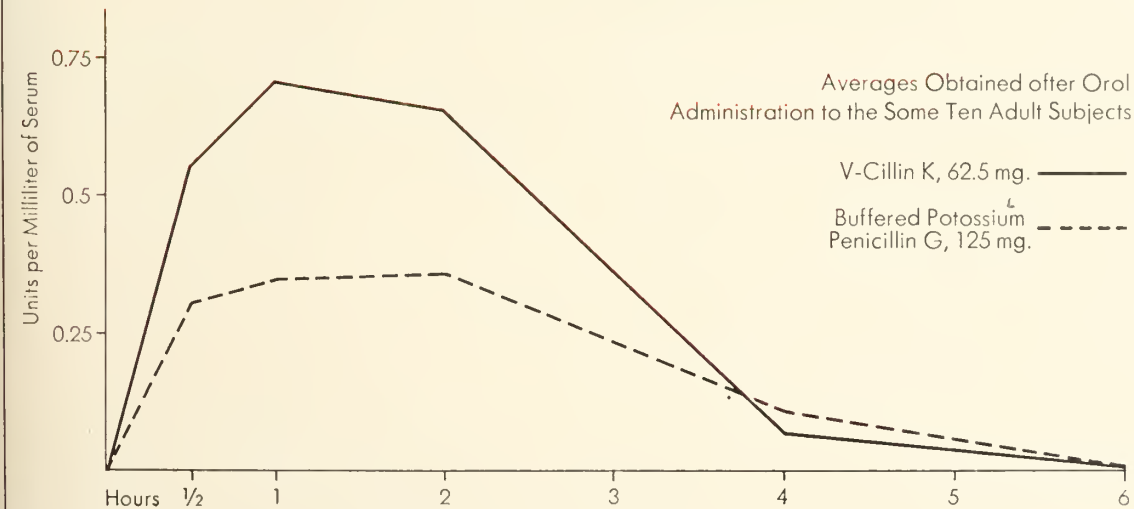
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Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
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Adapted from Klein, J. O., and Finland, M. New England J. Med., 269:1019, 1963.

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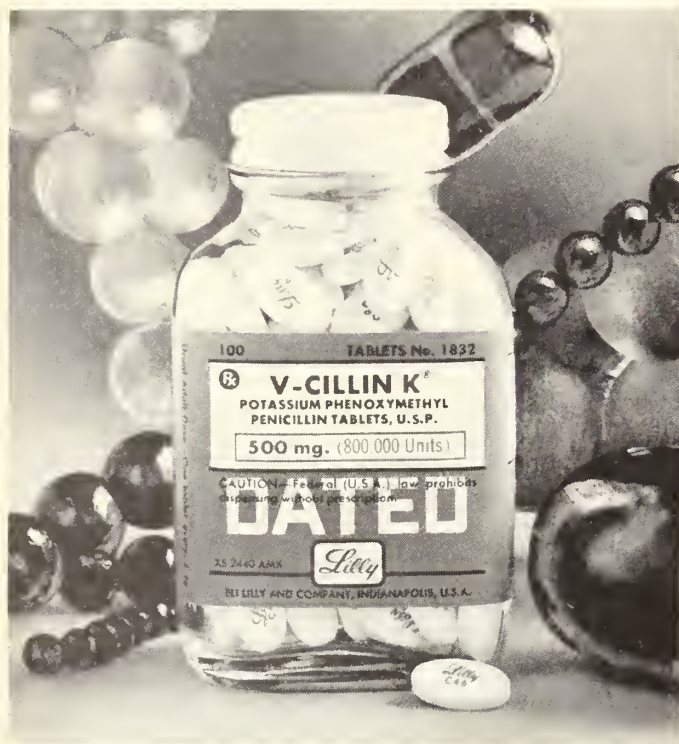


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those who have previously demonstrated sensitivity to penicillin. If severe hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness, and other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the development of growth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K, and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 200,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderate severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of the eye should have a dark-field examination before receiving penicillin. Monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) in bottles of 50 and 100, 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

To "catch" your patient's cold
so others won't...



the speckled tablet with a core of difference

SUSTAINED-ACTION

Naldecon®



Each tablet contains:	Outer layer (immediate action)	Core (sustained action)
phenylpropanolamine HCl	20 mg	20 mg
phenylephrine HCl	5 mg	5 mg
phenyltoloxamine citrate	7.5 mg	7.5 mg
chlorpheniramine maleate	2.5 mg	2.5 mg

Each teaspoonful (5 ml) of syrup contains the equivalent of one-half tablet

For rapid and sustained symptomatic relief of colds and minor upper respiratory infections.

Prescribing Information: For complete information consult Official Package Circular. **Effectiveness:** Clinical experience has shown this formulation to be effective in relieving the symptoms of nasal congestion associated with pollen allergy or minor upper respiratory infections (common cold, nasopharyngitis, acute and chronic sinusitis). **Precautions:** Do not drive or operate machinery while taking Naldecon. Exceed dose or give to children under 6 years old only on advice of physician. **Contraindications:** Severe hypertension, hyperthyroidism, serious organic heart disease or severe diabetes mellitus. **Usual Dose:** Adults: One tablet morning, midafternoon and evening. Naldecon tablets are scored and may be broken for fractional dosage, without loss of sustained-action effect. **Supplied:** Bottles of 50 and 500 tablets. Syrup, 1 pt. bottle.

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Syracuse, New York 13201

The Woman's Auxiliary

Health Careers

A meaningful, health related, full of activity program has been planned for the Medical Auxiliary at the State Convention, April 20, 21st, headquarters Whitley Hotel, Montgomery, Alabama.

Doctors' wives are becoming increasingly proud of being Medical Auxiliary members, as our communities identify the medical auxiliary as the group to turn to for support and leadership in helping solve its public health problems. Twenty-six years ago, a physician whose name is not recorded said, "The duty of a medical society auxiliary is to educate and mold public opinion."

This year our Auxiliary has recognized the critical shortage of medical personnel, and the declining number of students entering into the medical or paramedical field. Concentrated efforts have been directed to recruitment of personnel for health careers.

Under the direction of Mrs. Gene Qualls, Sheffield, WAMASA HEALTH CAREERS CHAIRMAN, and with financial assistance from the Medical Association of the State of Alabama, a 35 mm. slide and commentary on various health careers was purchased. Currently these slides are being shown throughout the state to high school students. Emphasizing the person to person approach and recognizing the value of visual aid, the county auxiliaries have used this slide program in high school assemblies, Health Career Clubs, county fair booths, and informal gatherings of young people. In a period of three months time, thousands of high school students have been made aware that there is a place for them in the medical world.

In high schools over the state, new health career clubs have been formed; and in schools already having organized clubs, membership has been increased. One medical auxilian serves as a sponsor, after the organization of the clubs.

In conjunction with the Alabama Hospital



Mrs. Ira B. Patton

Auxiliaries, the Medical Auxiliary helped sponsor four health career recruitment workshops in the four major cities of our state. A hospital representative, a local medical doctor, a health career council representative, a hospital auxiliary representative, and a Medical Auxiliary member served on a panel at each health career workshop.

Through the aid of the Health Career Council, literature has been sent to interested individuals or distributed in the schools by Auxiliary members. *Horizons Unlimited*, a soft bound publication describing health careers, training school, courses and interest needed has been purchased and placed in school libraries, and left with high school guidance counselors.

Future plans include: Completing a survey of physicians' wives trained in medical or paramedical careers, active or inactive, re-

WOMAN'S AUXILIARY

quested by Dr. Hawley and Health Careers Council. Tours are being planned to take students through hospitals, and health career days are anticipated for many high schools. Health careers workshops to stimulate more interest and knowledge for guidance counselors are being arranged.

Our husbands, respected for their knowledge, training, and consideration of their fellow human beings, are deserving of our support, understanding and talents. Members let's meet this ever-growing challenge of arranging more stimulating programs for our high school Health Careers Clubs.

Mrs. Ira B. Patton

—Mrs. Ira B. Patton

Ophthalmologist-Optometrist Cooperation Outlined

CHICAGO—An ophthalmologist may employ an optometrist to assist him, and physicians may teach in recognized schools of optometry, the Judicial Council of the American Medical Association has ruled.

The Council said, however, the ophthalmologist (a medical doctor who specializes in eye care) has an ethical responsibility to make sure patients will not be given the impression the optometrist is also a doctor of medicine.

The opinion, reported in The AMA News, was announced by E. G. Shelley, M. D., North East, Pa., Council chairman.

The statement added that physicians may teach in schools of optometry for the purpose of improving the quality of optometric education.

The scope of this teaching may embrace subjects within the legitimate scope of optometry which are designed to prepare students to engage in optometry within the limits prescribed by law, the statement said.

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- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS



Each tablet contains:

Potassium Iodide 195 mg.
Aminophylline 130 mg.
Phenobarbital, Caution: May be habit forming . . . 21 mg.
Ephedrine HCl 16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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The Rheumatic Diseases

Present Status of Knowledge of

Pathogenesis and Therapy

March 21-22, 1967

Presented by: The Medical College of Georgia; The Medical Association of Georgia; The Georgia Academy of General Practice.

General Information

This course will include a review of the current thinking in the field of Rheumatic Diseases concerning the pathogenesis of the most important diseases in this field: rheumatoid arthritis, systemic lupus erythematosus, osteoarthritis, scleroderma and gout. The evidence for and role of autoimmunity will be thoroughly analyzed. Present approaches to the therapy of these diseases will be discussed in the form of formal presentations and by discussion of interesting cases. The role of surgery and physical measures in the management of these diseases will also be discussed.

All sessions will be held in the small auditorium, Educational Building, Medical College of Georgia. Telephone calls for enrollees should be directed to 724-2417, Ext. 307. Registration fee \$50.00. Send registration and all communications to: Department of Continuing Education, Medical College of Georgia, Augusta, Georgia 30902.

This program is acceptable for fourteen accredited hours by the American Academy of General Practice.

NEW ECONOMICS—"Isn't it wonderful," the Christmas shopper exclaimed, "to live in an age when thrift would endanger the economy." (Daisy Brown)

Tandearil® oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.



Geigy Pharmaceuticals
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Ardsley, New York

Geigy

Tandearil®
oxyphenbutazone

helps osteoarthritic
joints move again



Please see ad-
joining page for
brief prescribing
summary

TA-4919 PC

Sperling, I L. 3 Years' Experience
with Oxyphenbutazone in the
Treatment of Rheumatic Disorders,
Applied Therapeutics 6:117, 1964.
Watts, T W. Jr. Treatment of Rheu-
matoid Disorders with Oxyphenbu-
tazone, Clin. Med. 73:65, 1966.

3 out of 4 osteoarthritics com-
pletely or markedly improved

76.9% of 407 patients

84.6% of 39 patients



New Horizons In Diagnosis Of Stroke

The past decade has witnessed the emergence of significant new methods in diagnosis and treatment of cerebrovascular disorders. The veil of gloom and futility which once enshrouded the diagnosis of "stroke" has been lifted.

Arteriography provided the impetus for the development of surgical measures by differentiating the extracranial components of cerebrovascular disorder. This study is still essential in accurate evaluation in any case of cerebral vascular disturbance and in determining the indications for surgical treatment. Better methods of arteriography have been accompanied by reduction of its hazards to a gratifying level, allowing wider utilization with minimal risks.

Carotid endarterectomy is an accepted procedure now employed in all vascular and neurological surgical centers. Long-term results in large series attest the minimal risk and satisfying outcome of the procedure, utilizing a simple and fairly well standardized technic. Major considerations relate to proper selection of cases, and adequate safeguards to prevent complications during the operation. Once the patency of the artery is re-established, there is no tendency for stenosis to reoccur. This procedure is most effective early in the course of cerebral vascular insufficiency and in prevention of cerebral infarction.

Once infarction occurs, surgical measures are of doubtful value, but medical management now has much to offer the acute stroke victim. Intensive medical care in the early phase, followed by a vigorous rehabilitation program minimizes the disabling effects of cerebral infarction. The role of anticoagulant therapy has been proven in basilar artery insufficiency and certain thromboembolic disorders. Fibrinolysin therapy is still in the experimental phase.

Hemorrhagic strokes are seen relatively less often as the medical treatment of hypertension becomes more effective. Some intracerebral hematomas are amenable to surgical evacuation. Intracranial aneurysms are now subject to direct surgical attack in most cases, and yield to indirect control by carotid ligation in the remainder.

Early recognition and prophylactic measures are receiving increasing emphasis in cerebrovascular disorders. It is thus incumbent on the medical profession to be alert to symptoms and early physical findings indicative of these disorders. In a situation where the earliest symptoms are so often both mild and transient, there has been a reluctance to subject the patient to diagnostic and treatment measures which have seemed hazardous and formidable. However, in view of the ultimate morbidity and mortality of these

disorders, one can no longer afford to be timid or hesitant when effective measures for diagnosis and treatment are available.

While further clinical research in stroke is needed, of immediate urgency is the matter of application of present knowledge in diagnosis and treatment of cerebrovascular disorders in all areas. It is obvious that the few clinical centers for cerebrovascular disease cannot fill this need. Continuing education for the medical profession, training of more nursing and paramedical personnel and

establishment of satellite community centers offer a solution to this urgent problem. The regional medical complex concept is the mechanism now being developed to meet this need, and its success will depend upon close cooperation in planning and implementation by the medical schools and the medical profession. This challenge must be met by these responsible parties if further governmental participation (and control) in medical practice is to be averted.

James Garber Galbraith, M. D.

Some Reasons Why You Should

Support your County Medical Society
Support your State Medical Association
Support your American Medical Association

You are aware of the necessity for raising the dues of the Medical Association of Alabama which was unanimously voted by the counsellors and delegates at a special call meeting of the Association in Montgomery on November 6, 1966. You probably are aware that the Medical Association of Mobile County found it necessary to raise their dues \$25, making a total of \$75. Others probably have done likewise or will before long.

The AMA Board of Trustees recommended to the House of Delegates at the Philadelphia Clinical Meeting in 1965 that AMA dues should be raised twenty-five dollars so that many activities would not have to be curtailed. The House of Delegates postponed a decision for six months so that the request could be more thoroughly studied by the Delegates and their state medical associations. At the June 1966 meeting of the House of Delegates the reference committee listened attentively and conscientiously to everyone who desired to be heard.

The Reference Committee reported to the House, "The subject of AMA financing and

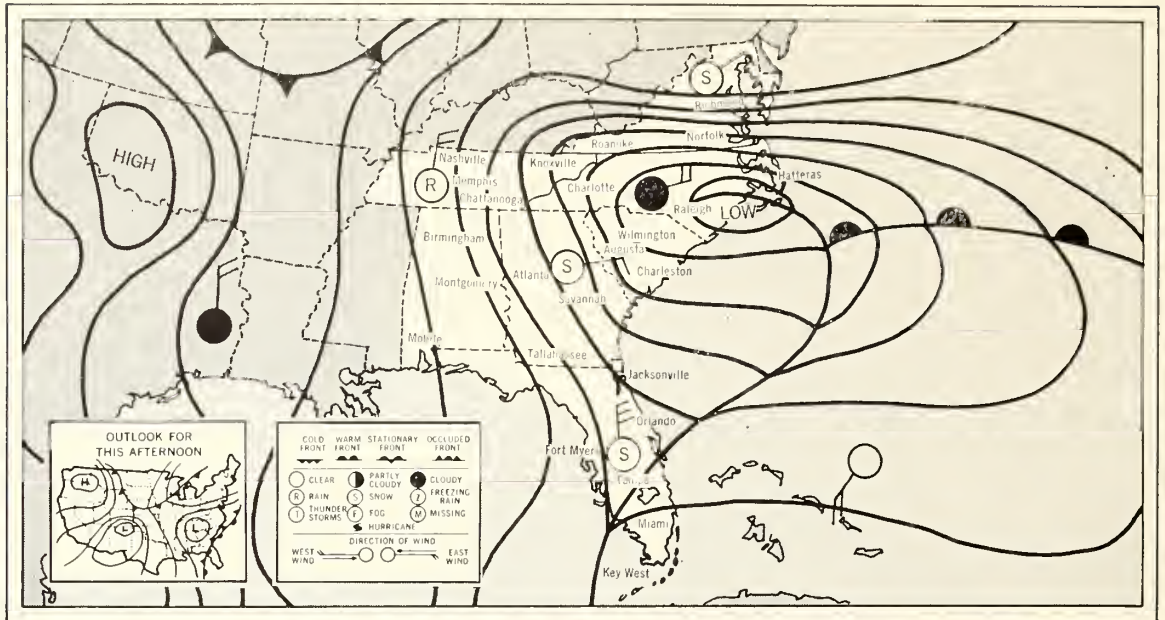
dues . . . received the most thorough possible consideration . . . After careful review of the programs, your Reference Committee believes that the increasing demands by the medical profession and the health needs of the public make it imperative for the (AMA) to extend its sphere of service and influence. It is quite apparent that the programs necessary to serve the needs of the members of the Association cannot be conducted effectively without adequate financing and it is equally apparent that such adequate financing is impossible without the dues increase requested by the Board of Trustees." The final vote was overwhelmingly in favor of a twenty-five dollar increase which would increase the dues from \$45 to \$70 per year payable, January 1, 1967.

You are or should be aware that the House of Delegates of the AMA is the policy making body of the AMA. The Board of Trustees and the Headquarters Staff of the AMA implement the policies determined by the Delegates. A tremendous majority of the Delegates are in the private practice of medi-

(Continued on Page 1029)

REGIONAL WEATHER FORECAST

Record Low Temperatures and Heavy Rain Followed by Cough, Stuffed and Runny Noses and Aches and Pains.



Tussagesic breaks up coughs, quickly clears stuffed and runny noses and relieves aches and pains. Provide coverage of the tough cold for up to 24 hours with just a single timed-release tablet dosed morning, midafternoon and at bedtime.

each

Tussagesic[®]

timed-release tablet contains:

Triaminic [®]	50 mg.
(phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. **Side effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES • a division of The Wander Company • LINCOLN, NEBRASKA

(Continued from Page 1027)

cine. Each state is allowed one delegate for each one thousand, or portion thereof, physician members paying dues to the AMA.

If many physicians in Alabama fail to pay their AMA dues it is quite probable that Alabama will lose a delegate to the AMA. In Alabama dues to the AMA is on a voluntary basis but quite a few states require members of the state association to also be a member of the AMA.

If you will acquaint yourself with the many activities which the AMA performs for the physician, you will, without doubt, strongly support your parent organization. These are some of the services to the profession.

"What the individual physician gets from membership in the AMA depends partly on the physician himself. Some of the benefits are provided as a matter of routine; others are available for the asking. Some can be valued in terms of dollars; others cannot.

For example, dues-paying members receive the weekly JAMA, their choice of one of the ten specialty journals, a reception room copy of Today's Health, and the AMA News. Thus, their \$45 in dues brings them without additional cost subscriptions valued at \$34.

Other benefits to the physicians include:

The latest developments in medical science presented at the Annual and Clinical Conventions.

The services of the Washington Office which include continuing liaison with members of Congress and government agencies on a wide variety of matters affecting medicine as well as the handling of requests from physicians and medical societies for information and assistance.

A Library of medical films, the largest in the world, each film available on request.

A variety of practice management aids to assist the physician in operating his office efficiently and economically.

Numerous authoritative health education pamphlets and other materials for distribution to patients.

Expert advice on medicolegal problems.

A comprehensive library service.

A physician placement service to help the physician who wants to relocate to find the community best suited to his desires.

A huge storehouse of information on a variety of scientific subjects, including drugs and drug therapy, foods and nutrition, pesticides and poisons, and numerous others.

Hundreds of meetings annually for constructive evaluation and decision on important medical and socio-economic developments."

Your state Medical Association and the American Medical Association are fighting your battles on many fronts—we need your full support.



M. Vaun Adams, M. D.

Associate Editor

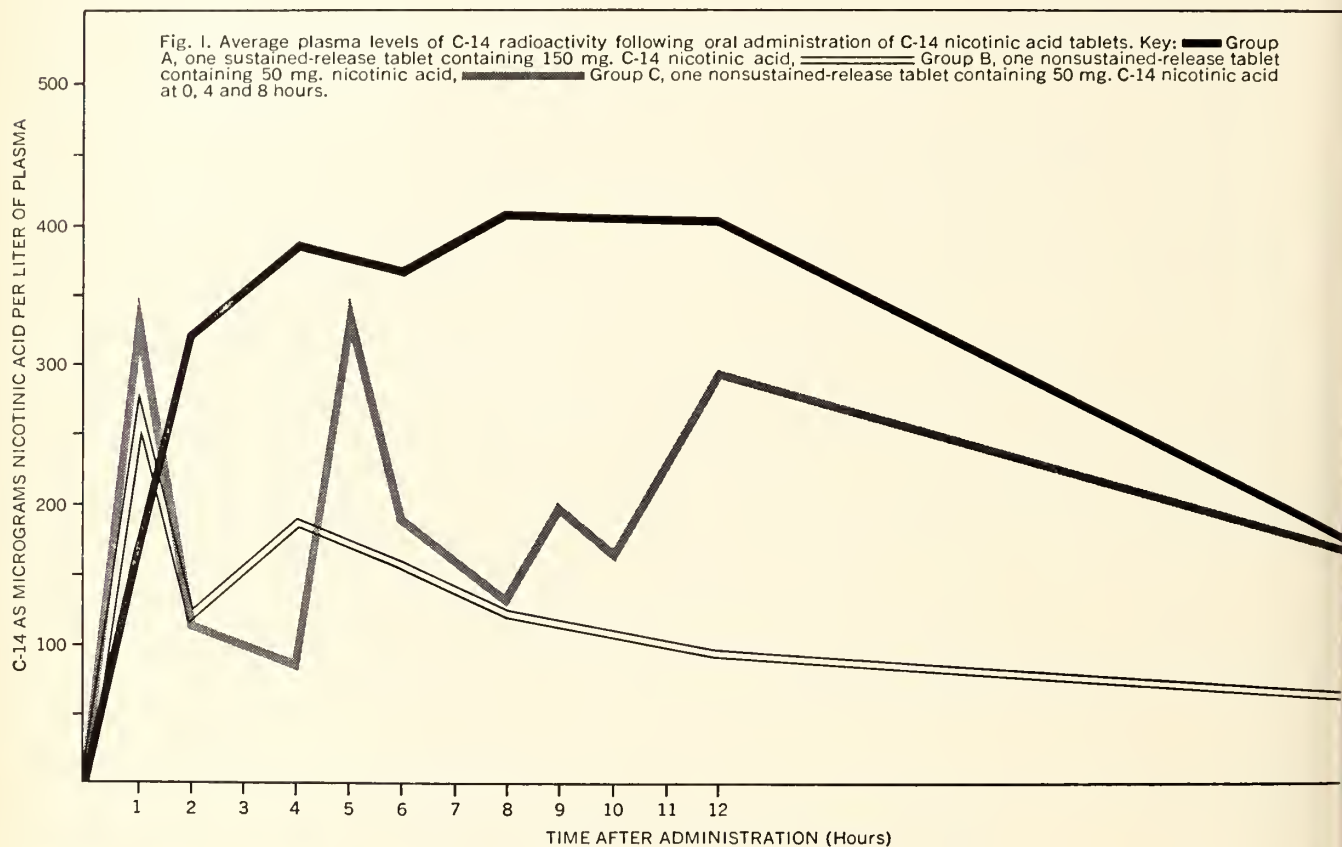
The Jew And Alcohol: An Unexplained Oddity

A great deal of time and interest has been devoted to a statistical oddity, but a happy one. It is an unchallenged fact that alcoholism among members of the Jewish faith is almost a rarity. From a purely percentage standpoint there are far fewer Jews who are alcoholics than there are among those of Protestant or Catholic persuasion.

A variety of reasons have been suggested to explain this situation. One suggestion has been that Jews generally do not drink to excess because alcohol is so closely associated with religious observances within the family. A ceremonial glass of wine is taken every

(Continued on Page 1032)

Sustained circulatory, respiratory and cerebral stimulation for the



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

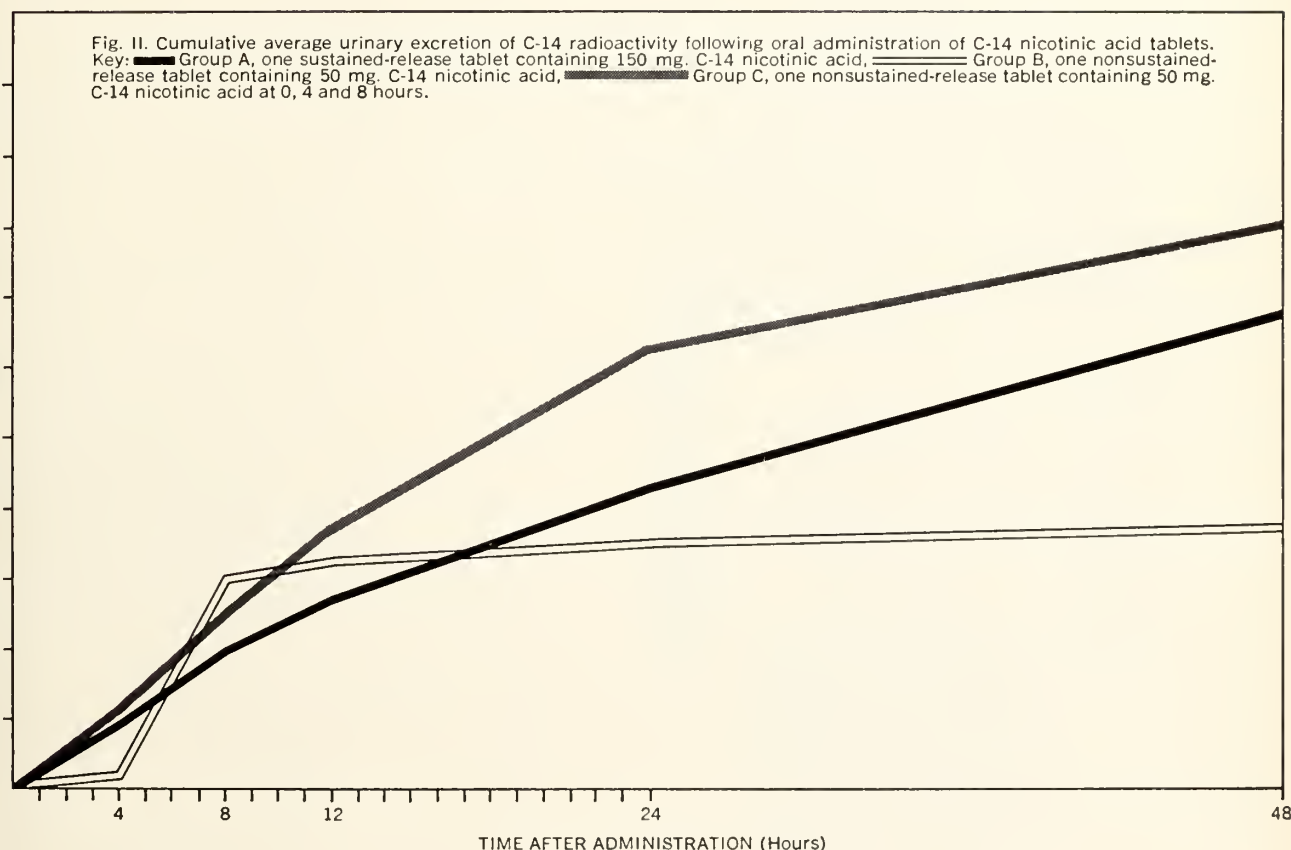
The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also cerebrovascular circulation is complemented by per tylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ged and debilitated

C-14 AS MILLIGRAMS NICOTINIC ACID EXCRETED

Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



less confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylentetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.



"First with the Retro-Steroids"

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Division of Philips Roxane, Inc., Columbus, Ohio

A Subsidiary of Philips Electronics and Pharmaceutical Industries Corp.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylentetrazol 300 mg.

Tempotrol[®] Time Controlled Tablet

(Continued from Page 1029)

Friday night by members of the family as the Sabbath begins, and on other religious holidays similar use of wine is practiced.

Still another suggestion is that the almost universal Jewish respect for mental ability and education is incompatible with the proven dulling aspects of alcohol.

However, one rabbi quizzed on the subject may have come up with the best answer yet. He pointed out that the first taste of alcohol a Jewish boy gets is when he is circumcised. The association of one with the other could understandably discourage him from having one for the road.

Dangerous Trend Seen In Malpractice Cases

In recent years the courts of this land have moved into an area of malpractice damage suits which has caused grave concern to physicians. What the courts have not yet appeared to comprehend is that the effect of some of these rulings could eventually have a far greater effect on the public than on the doctor.

Specifically we refer to several decisions in which damages were ordered paid for "mental anguish" allegedly suffered by the patient. Only recently a New York housewife was awarded \$10,000 for "burns" sustained while being treated by X-ray for bursitis. But beyond this, she was given an additional \$15,000 for "cancerphobia" which she said she developed because of the "burns." The fact is she never developed cancer, yet the New York Court of Appeals held that "the wrongdoer is liable for the ultimate result."

In another case a sizable award was made for "mental anguish" allegedly caused as a result of treatment. In this instance the court espoused the doctrine that "freedom from mental disturbance is now a protected

interest in this state." But what the court failed to say is how does a physician refute testimony that a plaintiff was "mentally disturbed" by what he said or did.

These decisions, coupled with growing instances of malpractice suits in which the courts have denied the admission of expert medical testimony, have made it far easier to successfully sue doctors.

These trends as reflected by court decisions are indeed ominous. Some of these rulings have come dangerously close to the principle that the doctors should be financially liable for unsuccessful treatment.

The danger these rulings pose to the public should be obvious. No doctor can properly treat the public if he is to be the guarantor not only of the patient's safety but the results as well. Nor can doctors properly treat them if it is necessary to point out all of the complications that could result from any simple procedure.

If the courts continue down this path, then the day may well come when the desire of the people to be compensated for any adverse happening will cause physicians to say, "I'd like to help you but I can't take the chance."



Reprinted from *Missouri Medicine*

Estomul does what standard anticholinergics fail to do—it provides a continuous climate for ulcer healing, eliminating the peaks and valleys of ordinary therapy. It is a comprehensive formulation providing sustained antisecretory effect on gastric activity. A recent study¹ reported a 56% satisfactory response with a maintenance schedule of Estomul in patients refractory to all previous medication. In less difficult peptic ulcer patients, a second study² noted a 94% satisfactory response. Both studies confirmed this clinical improvement radiologically. And both reported unusually prolonged reduction of basal secretion. With a maintenance course of Estomul therapy you can provide this continuous climate for healing in your own peptic ulcer patients.

A continuous climate for ulcer healing

(not simply episodic reduction of secretion or motility)

Estomul[®]

Tablets

Each swallow tablet contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 25 mg.; magnesium oxide, 45 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 500 mg.

Good-Tasting Liquid

Each tablespoon (15 cc.) contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 50 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 918 mg.

Dosage: 1 or 2 tablets or 1 or 2 tablespoons 3 times daily.

Supplied: In bottles of 100 tablets or 12 fluid oz. .

Side Effects: Doses in excess of 6 tablets or 6 tablespoons daily may produce dryness of mouth or blurring of vision. Other possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Contraindicated: In glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia and myasthenia gravis.

References: 1. McHardy, G. G., Judice, R. C., McHardy, R. J., and Cradic, H.: Southern Med. J. 59:459 (April) 1966. 2. Slanger, A.: Western Med. 6:205, 1965.



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Michigan, Texas Fight Venereal Disease

CHICAGO—Two state medical societies are starting statewide educational programs to control venereal disease, the AMA News has reported.

In Michigan, the Congress of Parents and Teachers (PTA) and Michigan State Medical Society are cooperating in a program to educate students, teachers and parents about the threat of VD and ways to control it.

The project is believed to be the first of its kind in the nation, says the National PTA headquarters in Chicago.

The Texas Medical Association is preparing a similar campaign which may become the most extensive such program in the nation.

A Conference on Venereal Disease was sponsored Jan. 28 by the TMA, Texas Department of Health, Texas Junior Chamber of Commerce, and Texas PTA.

Attending were key officers and committee chairmen of 11 state organizations interested in VD control programs.

Statistics furnished by the City of Houston Health Department indicate the need for the program. The department estimates 140,000 Texans are infected by VD each year; that for the 4-month period July-October 1966, Texas was one of only two states showing a significant increase in reported infectious syphilis and that Texas reported the second highest number of infectious syphilis cases and the largest number of venereally infected teenagers.

During this same 4-month period, Michigan had the second largest increase in reported cases of infectious syphilis.

About 1,000 Michigan PTA groups have been contacted by the Michigan State Medical Society, and urged to contact local medical societies for assistance in presenting VD programs at their meetings and to help conduct VD assembly meetings in schools.

The state's 55 local medical societies have

been urged by the MSMS to cooperate in the programs. Physician-speakers have been provided for youth groups, and a seminar on VD was held at the state society's annual meeting.

The National Congress of Parents and Teachers, at its national meeting in May, approved a resolution calling for a "sound and adequate program of venereal disease education in every school system in the United States, beginning at least by the eighth grade . . ."

The American Medical Association, at its annual meeting in June, gave renewed emphasis to its nationwide VD control program.

International Experts Discuss Obesity At Dallas Medical Seminar

Four of the world's leading medical authorities on obesity met at Dallas, Texas today (Monday, February 6, 1:30 p. m.) in a seminar discussion of what a Swiss investigator has termed "an overlooked but immensely serious disease that is more common than the cold and perhaps a far greater contributor to man's unhappiness and loss of life than even cancer."

This statement, quoted by Dr. Jean Mayer, director of the Department of Nutrition at Harvard University's School of Public Health, marked the opening of the Strasenburgh Obesity Seminar held under the auspices of Strasenburgh Laboratories, a division of Wallace & Tiernan.

Dr. Mayer holds a Ph.D. in physiological chemistry from Yale University and a Doctor of Science degree from Sorbonne University, Paris, France. He had previously been affiliated with the United Nations' Food and Agriculture Organization.

In his discussion, Dr. Mayer placed particu-

(Continued on Page 1036)



in alcoholism:

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Each capsule contains:
 Vitamin B₁ (as Thiamine Mononitrate) 10 mg
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 Niacinamide 100 mg
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 Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

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(Continued from Page 1034)

lar emphasis on the physiology of obesity and the sensation of hunger. He said that, "Among obese subjects, abnormalities in satiety or satisfaction may be much more common than abnormalities in hunger.

"Despite folklore to the contrary, research seems to indicate that obese subjects miss breakfast, lunch or dinner *more* frequently than the non-obese; they eat sweet desserts *less* often; but they *more* often clear their plates and tend to eat *more* snacks in the absence of hunger sensations.

"However," Dr. Mayer cautioned, "it is at the end of meals that obese subjects differ most from non-obese. They require more will-power to stop eating, even though they report more frequent sensations of discomfort at the end of meals. The obese are frequently preoccupied with thoughts of food *after* a meal, a phenomenon which is rarely found in the non-obese."

Among the other participants in the Strasenburgh Seminar was Dr. Burton Cohen, senior attending cardiologist at St. Elizabeth's Hospital in Elizabeth, New Jersey and assistant professor of clinical medicine at New Jersey College of Medicine and Dentistry in Jersey City. Dr. Cohen is also associate director of the White Cardiopulmonary Institute, Pollak Chest Hospital, Jersey City.

Dr. Cohen discussed the treatment of obesity as a medical disease in office practice. He noted that of 300 consecutive patient physical examinations over an eight-month period, nearly half (48.3%) were classified as obese (more than 15% above standard weight).

Among this obese group, 12.3% had high blood pressure; 10.3% showed an elevated blood cholesterol level; 9% had a history of gall bladder disease; 7.7% were diabetic; and 6.7% gave evidence of heart damage from arterial blockage.

Dr. Cohen indicated the use of prolonged release anorectic (appetite-suppressant) agents as part of a comprehensive supervised pro-

gram of weight reduction "can produce very satisfactory results."

"Over an average of 6.5 months, 35 obese patients suffering from high blood pressure reduced their average body weight from 204.6 pounds to 171.8 pounds. Average blood pressures for this group dropped from 189.0/105.0 to 138.4/83.3.

"Similarly, in the management of 19 patients with diabetes mellitus, an average weight reduction for the group to 170.9 pounds from 180.8 pounds allowed the average insulin requirement to be nearly halved from an average of 37.0 units to 19.2 units."

Dr. Edgar Stillwell Gordon joined the Strasenburgh Seminar to describe the relationship between metabolism and obesity. Dr. Gordon, a graduate of Harvard University's School of Medicine and formerly a resident in pathology at Massachusetts General Hospital, Boston, is now professor of medicine and chief of the division of metabolism and endocrinology at University Hospital, Madison, Wisconsin.

"Obesity may be related to individual differences in the thermodynamic efficiency of the 'human engine' from person to person. If the 'human engine' is even one or two per cent inefficient, a person can become obese.

"There seems to be a progressive loss of ability to oxidize or 'burn' glucose sugars from the normal individual to the mildly obese to the diabetic obese, and a similar pattern seems to take place in the oxidation of free fatty acids."

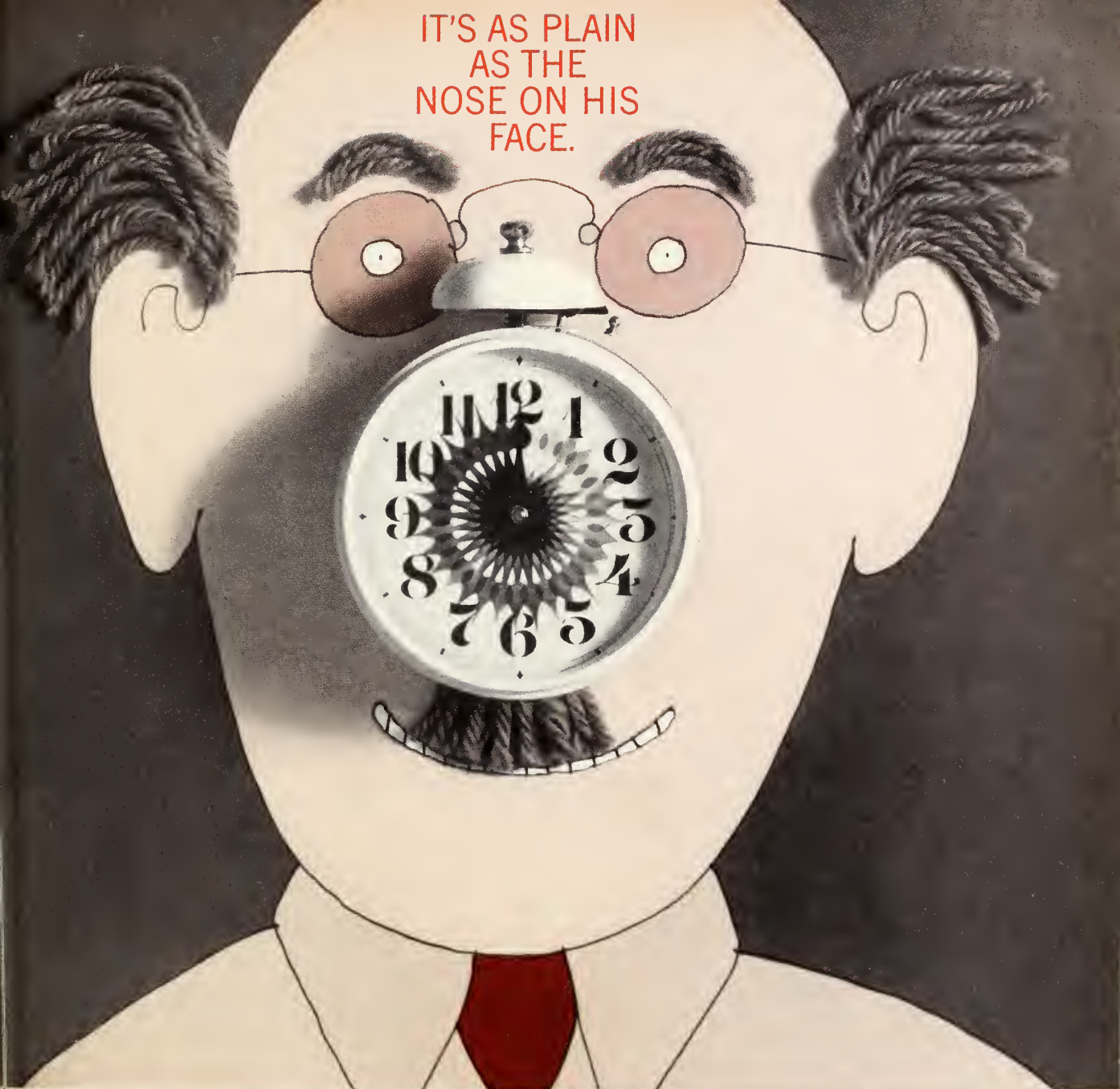
Dr. Gordon stressed that there are "many oddities of metabolic behavior in the obese, and we're not sure if these differences between normal and obese patients are the result or the cause of the obesity."

"I still think," Dr. Gordon concluded, "that people are obese because they eat too much, but what is too much for one man is not too much for another."

The fourth participant in the Strasenburgh Seminar was Dr. Alvan Richard Feinstein,

(Continued on Page 1043)

IT'S AS PLAIN
AS THE
NOSE ON HIS
FACE.



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caused side effects as few as the placebo,*
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a dependable 10- to 12-hour form.

Contraindications: Patients hypersen-
sitive to antihistamines. Not recom-
mended for use during pregnancy.

Precautions: Until the patient's
response has been determined, he
should be cautioned against engaging
in operations requiring alertness.
Administer with care to patients with
cardiac or peripheral vascular
diseases or hypertension.

Side Effects: Hypersensitivity
reactions including skin rashes,
urticaria, hypotension and thrombo-
cytopenia have been reported on

rare occasions. Drowsiness, lassitude,
nausea, giddiness, dryness of the
mouth, mydriasis, increased irritability,
or excitement may be encountered.

Dosage: 1 Extentab morning
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Chir, I. W., and Lowell, F. C.: New England
J. Med. 261:478, 1959.



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- quickly relieves congested nose
- action is gentle, yet prolonged
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INDICATION: Nasal congestion. **CONTRAINDICATION:** Do not use in patients sensitive to small doses of sympathomimetic substances. **WARNINGS:** Prolonged or excessive use may cause rebound congestion. Use cautiously in patients with hyperthyroidism, coronary artery disease, hypertension, and diabetes. **CAUTION:** Do not shake Nasal Spray. Rinse Nasal Solution dropper or Nasal Spray tip in hot water after each use. No more than one person should use the same dropper bottle or nasal spray.


SIDE EFFECTS: Occasional local reactions: rebound congestion, slight burning or stinging, sneezing, dry nose. Occasional systemic effects: headache, drowsiness, lightheadedness, insomnia, palpitations. Overdosage in young children may produce profound sedation.

USAGE: **Adults:** Nasal Solution—2 or 3 drops in each nostril every 4 to 6 hours. Nasal Spray—Squeeze rapidly once or twice in each nostril every 4 to 6 hours. **Children under 12:** Pediatric Nasal Solution—2 or 3 drops in each nostril every 4 to 6 hours. One drop should be used

in infants under 6 months. **Pediatric Nasal Spray**—Squeeze rapidly once in each nostril holding tube upright; repeat every 4 hours as necessary. **SUPPLIED:** OTRIVIN® hydrochloride (xylometazoline hydrochloride CIBA) Nasal Solution, 0.1%; dropper bottles of 1 fluidounce, bottles of 1 pint. Nasal Spray, 0.1%; plastic squeeze tubes of 15 ml. Pediatric Nasal Solution, 0.05%; dropper bottles of 1 fluidounce. Pediatric Nasal Spray, 0.05%; plastic squeeze tubes of 15 ml. Nasal Solutions contain either 0.1% or 0.05% xylometazoline hydrochloride, triethanolamine, hydrochloric acid, sodium chloride, and phenylmercuric acetate 1:50,000 as preservative in water. Nasal Sprays contain either 0.1% or 0.05% xylometazoline hydrochloride, potassium phosphate monobasic, potassium chloride, sodium phosphate dibasic, sodium chloride, and benzalkonium chloride 1:5000 as preservative in water. Consult complete literature before prescribing.

273329 MKL-1

C I B A

A dramatic, low-key photograph with a dark, moody atmosphere. Two hands are shown in the process of cracking open walnuts. The hands are positioned on either side of the center, with fingers gripping the textured, brown shells. The lighting is focused on the hands and the walnuts, creating strong highlights and deep shadows. On the dark, reflective surface in front of the hands, several small, white, oval-shaped pills are scattered. One pill is near the left hand, a small cluster of four is in the center, and another is near the right hand. The overall composition suggests a metaphorical link between the physical act of cracking a nut and the medical use of a diuretic.

Do your patients
shell out too much
for a diuretic?

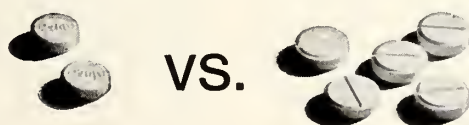
The answer may be yes...if they're not on Hygroton. For instance, a therapeutic dose of a short-acting diuretic may cost 3 times as much as an equivalent dose of Hygroton. With Hygroton, in fact, you can usually do the job with just one tablet a day or one every other day. It's no wonder that the trend has been away from short-acting, multiple-dose, high-cost diuretics.

You may hear that a short-acting diuretic was more effective in a 400 mg. (ten-tablet) dose than Hygroton in a 200 mg. (two-tablet) dose.

If one considers maximum recommended doses for each product, tablet for tablet Hygroton was clearly superior. Two tablets of Hygroton were found to produce almost 40% more natruresis and 20% more weight loss than five tablets of the other diuretic.* Note that these are maximum recommended doses!

For effectiveness, economy, and convenience, therefore, Hygroton is the diuretic to choose to start with and the one to stay with.

*Brest, A. N., et al.: J. New Drugs 5:329, 1965.



Natruresis above control values after maximum recommended doses (mEq./24 hours) in "normal" patients

111
5 tablets short-acting
nonthiazide diuretic

152
2 tablets
Hygroton

48-hour weight loss after maximum recommended doses in edematous patients with congestive heart failure due to arteriosclerotic or rheumatic heart disease

1.84 lbs.
5 tablets short-acting
nonthiazide diuretic

2.2 lbs.
2 tablets
Hygroton

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH,

or digitalis. Salt restriction is not recommended.

Side Effects: Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration.

Average Dosage: One tablet (100 mg.) with breakfast daily or every other day.

Availability: Tablets of 100 mg. in bottles of 100 and 1000. For full details, see the complete prescribing information. 6524-V(B)

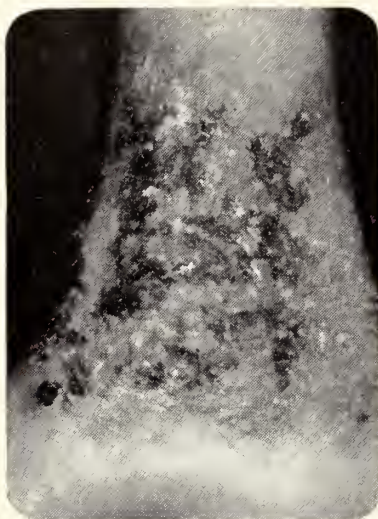
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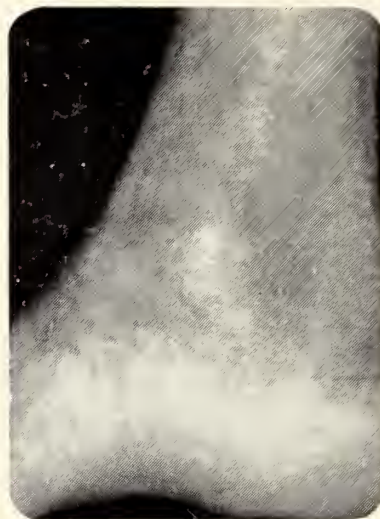
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Eczema of many years... controlled in two weeks



Before treatment



After treatment —
with ARISTOCORT Topical
Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side

effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyoderma will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

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Aristocort®

Topical Ointment 0.1% and Cream 0.1%, 0.5%
Triamcinolone Acetonide

Also available in foam form.



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406 G

(Continued from Page 1036)

presently associate professor of medicine at Yale University. Dr. Feinstein received his medical degree from the University of Chicago in 1952 and since that time has served as a visiting investigator at the Rockefeller Institute Hospital and as assistant resident in medicine at Presbyterian Hospital, New York City. Dr. Feinstein was previously director of epidemiologic studies at Irvington House in New York City and chief of clinical biostatistics at the Veterans' Hospital in New Haven, Connecticut.

"The fact of obesity is of direct relevance in the presence and treatment of such conditions as diabetes, cardiovascular conditions and orthopedic ailments," Dr. Feinstein said. "In the past," Dr. Feinstein continued, "we have probably placed too little emphasis on the importance of the so-called 'Pickwickian syndrome' in which obesity causes a lessening of vital lung capacity and the characteristic 'fat boy' appearance and wheeze. This, in turn, seriously hampers oxygen exchange and can badly upset the body's whole system of cell metabolism."

Sex Education Expert To Be Featured Speaker At Auxiliary Convention

Mary Calderone, M. D., noted proponent of sex education, will be one of the speakers at the 44th Annual Convention of the Woman's Auxiliary to the AMA, June 18-22, in Atlantic City. Convention headquarters will be the Shelburne Hotel.

Dr. Calderone's talk, "Sex Education: Goals and Means," is scheduled for Tuesday morning, June 20, according to Mrs. Asher Yaguda, Newark, N. J., Auxiliary president.

Also speaking on Tuesday will be Charles L. Hudson, M. D., AMA president. Dr. Hudson's talk will be made at the luncheon honoring Auxiliary past presidents and AMA officers and trustees. The Auxiliary's contribution to AMA-ERF will be presented at that time, as well as awards to county and state AMA-ERF winners.

Mrs. Yaguda and Mrs. Karl F. Ritter, Lima, Ohio, president-elect, will be honored at a reception Sunday, June 18. Mrs. Ritter will be installed as president Wednesday, June 21.

Other convention highlights will be "The Little Workshop," a question-and-answer session on Auxiliary programs, and reports on community service, international health activities, health careers, legislation, mental and rural health and safety-disaster preparedness projects. State auxiliary presidents will discuss outstanding local programs at the Monday and Tuesday sessions.

The Auxiliary will also sponsor a teen-age program for children of physicians and guests attending AMA convention, held concurrently with the Auxiliary meeting. A Sunday afternoon mixer and pool party are among the events planned.

INFLAMMATION: A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

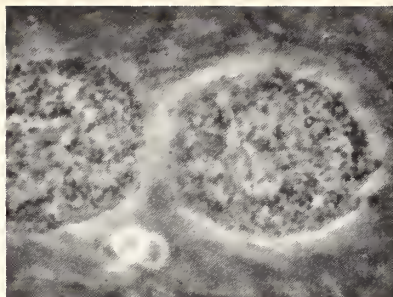


Visual evidence of how corticosteroids influence the inflammatory reaction

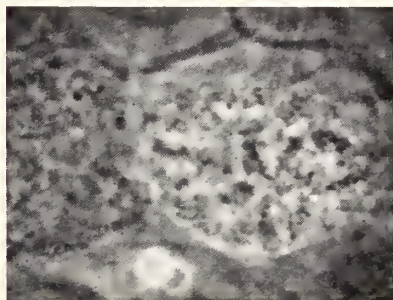
Working with phase-contrast cinematography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



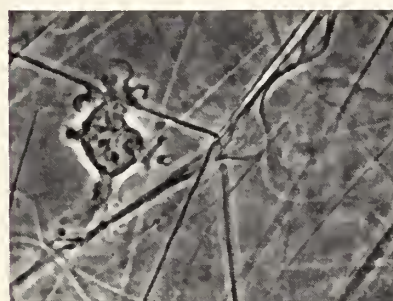
Phase-contrast microscopy showing mast cell before injury.



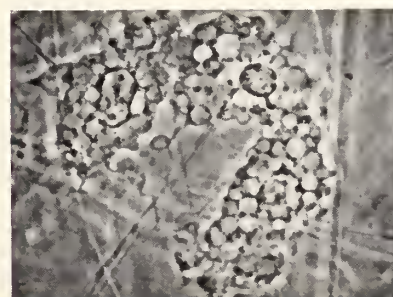
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid — Synalar (fluocinolone acetonide) — the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.

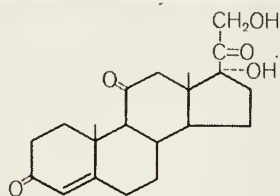


In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

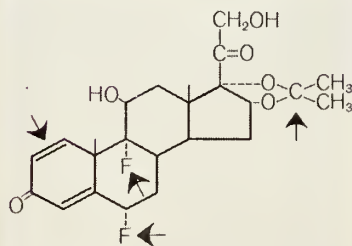
*A New View of Corticosteroid Action in Inflammatory Dermatoses, a film based on this study, is now available from your Syntex representative.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more corticosteroid. And it can often do it more effectively.



Hydrocortisone



Fluocinolone Acetonide (Synalar)

- a double bond between carbons 1 and 2
- fluorine substitutions at both the 6- α and the 9- α positions
- the addition of the acetonide at the 16- α , 17- α positions, thus providing one of the most potent topical corticosteroids available.

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY¹⁻⁴ is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B— injected with 1, 2 and 4 mg. of hydrocortisone—show progressively smaller thymuses as does Group C— injected with fluocinolone acetonide—but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY¹⁻⁴ also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. **Contraindicated** in individuals with a history of hypersensitivity to any of the components. **PRECAUTIONS:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for pro-

longed periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. **SIDE EFFECTS:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. *Ann NY Acad Sci* 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. *Proc Soc Exp Biol Med* 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: *Methods of hormone research*, New York, Academic Press, 1964, vol. III, pp. 234-280. 4. Gubersky, V. R.: To be published.

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dermatoses...
by any measure
a topical corticosteroid
of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram
one of the most active topical
corticosteroids available

Rapid and predictable
in antiinflammatory and
antipruritic activity

Results often comparable to
those of systemic corticosteroids
with fewer hazards

fluocinolone acetonide — an original steroid from
SYNTEX 
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Mr. Chairman and
Members of the Committee:

My name is Joseph M. Dixon. I am a physician licensed to practice medicine and surgery in the State of Virginia, West Virginia, and Alabama. I specialize in diseases and surgery of the eye and practice in Birmingham, Alabama where part of my work is with contact lenses, which I furnish; but I do not supply eye glasses.

Professional positions I hold at this time are as follows:

1. President Elect, and Chairman of the Contact Lens Committee of the American Association of Ophthalmology.

2. President Elect of the Contact Lens Association of Ophthalmologists with a membership of 600 physician eye specialists interested in contact lenses.

3. Associate examiner of candidates for certification by the American Board of Ophthalmology. I am also certified by the Board.

4. Member of the American Medical Association Study Committee on Ophthalmology.

5. Consultant to the Surgeon General of the U. S. Public Health Service for the past 3 years.

6. Associate Professor of Ophthalmology at the University of Alabama Medical Center and Director of the Eye Pathology Laboratory.

During World War II, I served five years in the Army as Hospital Commander, and

Professor of Military Science and Tactics with the rank of Lt. Colonel.

I am a past president of the Alabama Academy of Ophthalmology and Otolaryngology.

During the past seven years I have directed a program of research at the University of Alabama to study the changes in tissues of the eye caused by wearing contact lenses and have published scientific papers on this subject.

Today I represent the American Association of Ophthalmology with a membership of nearly 3000 physician specialists in diseases and surgery of the eye.

In my understanding, a contact lens is an optical device as defined in Section 3(d) of this Bill because it affects the visual function of the human eye. Licensed and practicing Ophthalmologists are practitioners as defined in this act because they are qualified to administer drugs or devices in the practice of medicine for the diagnosis, cure, or prevention of disease of any structure or function of the human body. Ophthalmologists are physicians who specialize in diseases and surgery of the eye.

The proper fitting of contact lenses includes a medical examination for disease of the eye and the use of drugs. The contact lens is a foreign body in contact with delicate eye tissues. It sometimes leads to serious complications that require emergency medical diagnosis and treatment. A report by our Association in the Journal of the American Medical Association, March, 1966, has documented 14 instances in which eyes were blinded by contact lenses and 157 others permanently damaged.

Proper and improper fit of contact lenses

Statement of Joseph M. Dixon, M. D., Birmingham, Alabama, on behalf of the American Association of Ophthalmology to the Senate Subcommittee on Antitrust and Monopoly, Tuesday, January 31, 1967.

is determined in part by the diagnosis of abnormal eye changes.

Many ophthalmologists fit contact lenses in their own offices and the supply of these lenses is a part of the professional service to the patient. Other ophthalmologists prefer to make the professional examination then use the services of a competent technician who supplies the lenses. The patients then report back to the ophthalmologist for medical eye care.

In some patients contact lenses are used for the treatment or correction of eye diseases or injuries, such as burns of the cornea; corneal scars; irregular astigmatism; albinism; aniridia; and following corneal transplants. In other cases lenses are placed in the eye or in the cornea by a surgical operation.

In my State of Alabama dentists and ophthalmologists are exempt from collecting a sales tax on dentures and contact lenses because this is considered to be a professional service and does not constitute a sale of merchandise. This professional service could not monopolize trade or restrain commerce because none but a physician can diagnose and treat eye diseases or complications due to wearing a contact lens. Is it not a distortion of fact to say that these acts are trade or commerce?

As I read your proposed Bill S. 260 as a physician, questions come to mind that disturb me, such as the following:

1. Under Section (2) is it necessary for the device (contact lens) to be in interstate commerce to be a violation. May physicians purchase lenses manufactured locally and fit them to patients in their own offices? Some buy partly finished lenses locally and modify them to properly fit the patients' eyes in their own offices. A few make the entire lens from a small button of plastic. When these lenses are furnished to no one but their own private patients, are these physicians restraining trade or commerce?

2. As I read the Bill, I am a practitioner qualified to administer the device (contact

lens which affect the visual functions of the human eye). Under Section (4) I am in violation if I "sell" the device if it is *available* at an *available* optical dispensary. If I fit the lens to the eye of my patient, and the patient pays a professional fee which includes the lens, have I *indirectly* sold the device under Section 4(a)?

If the patient pays a professional fee for his medical examination and fitting the lens to his eye, then reimburses the physician for his laboratory cost of the lens; is that a sale under this Bill?

4. Under Section 3(e) it is not clear to me what an optical dispensary is. This term, optical dispensary, is defined as any office, shop, or establishment which engages in the sale at retail or wholesale of optical devices which affect any function of the human eye. In my own area this includes the dime store which sells reading glasses, the drug store which sells sun glasses, which affect the function of dark adaptation of the eye, the dispensing optician, and the optometrist. Many of these places advertise in the telephone directory that they also sell contact lenses. They are "available" as defined in this Bill. They are also "optical dispensaries" as defined in Section 3(e) of this Bill. Are these places clean and sanitary? Have they heard of *pseudomonas aeruginosa*, endothelial dystrophy, filtering cicatrix, or *candida albicans*? Unfortunately, each of these has caused blinded eyes because a contact lens was on the eye. This Bill does not define the qualifications of an optical dispensary. It only specifies that it sell merchandise.

5. The difference between fitting a device and selling a device is not clarified by S. 260. When a device is fitted by a physician as a necessary treatment for a disease, how is the device paid for? If there is an available optical dispensary, (Section 3(e)), is the physician prohibited from putting the lenses on the eyes of his patients? If he is not prohibited from performing this medical act, where does he get the lenses? Must the pa-

(Continued on Page 1052)

for that added measure of protection

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Contraindications: Contraindicated in individuals who have shown hypersensitivity to any of its components. Not recommended for prophylaxis or in the management of infectious processes which may require more than 10 days of continuous therapy. If clinical judgement dictates therapy for longer periods, serial monitoring of liver function is recommended. Not recommended for subjects who have shown abnormal liver function tests, or hepatotoxic reactions to triacetyloleandomycin.

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function are reversible after discontinuation of the drug.

Use with caution in lower than usual doses in cases with renal impairment to avoid accumulation of tetracycline and possible liver toxicity. If therapy is prolonged under such circumstances, tetracycline serum levels may be advisable. In long term therapy or with intensive treatment or in known or suspected renal dysfunction, periodic laboratory evaluation of the hematopoietic, renal and hepatic systems should be done. Formation of an apparently harmless calcium complex with tetracycline in any bone forming tissue may occur. Use of tetracycline during tooth development (3rd trimester of pregnancy, infancy and early childhood) may cause discoloration of the teeth. Reversible increased intracranial pressure due to an unknown mechanism has been observed occasionally in infants receiving tetracycline. Glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and definite allergic reactions occur rarely. Severe anaphylactoid reactions have been reported as due to triacetyloleandomycin. Photosensitivity and photoallergic reactions (due to the tetracycline) occur rarely. Medication should be discontinued when evidence of significant adverse side effects or reaction is present. Patients should be carefully observed for evidence of overgrowth of nonsusceptible organisms including fungi, which occurs occasionally, and which indicates this drug should be discontinued and appropriate therapy instituted. Steps should be taken to avoid masking syphilis when treating gonorrhea.



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(Continued from Page 1049)

tient go to the available optical dispensary, buy the lenses, and bring them to the ophthalmologist to place on his eyes? Is the patient compelled to buy the lenses from the available optical dispensary regardless of the cost or quality of the lenses? Or is the ophthalmologist compelled to buy the lenses from the same available dispensary in order to safely fit them to his patients' eyes by medical judgement, regardless of their cost or quality?

6. Section 4 prohibits a practitioner from directly or indirectly selling drugs or devices (contact lenses) unless there is no pharmacy or optical dispensary reasonably available as a source. What is meant by "available?" Is the patient walking, riding a bicycle, driving his automobile, young and active, or old and feeble? How far does trading area extend? Fifty or 100 miles?

7. What happens if the available dispensary damages my patients' eyes? Could I stop sending patients there? Under Section 8 could the available dispensary sue me if I do?

8. How will patients be protected from an unscrupulous available optical dispensary when the patients' physician is in fear of a damage suit?

9. How will the conscientious physician be protected from an unscrupulous or incompetent optical dispensary which happens to be available but may sue the physician for damages from restraint of trade if he interferes?

10. What happens to my patients who are now wearing contact lenses? I have all of their exact measurements, and many of these people are scattered over the country as students in universities from New England to California. When they call by telephone for a duplicate of a lens they have lost, do we say, "Sorry, that's restraint of trade?" Or do

we help them out and take a chance on being sued?

11. What do I do about my confidential office records when the available merchant demands them to use to sell his merchandise? If I refuse, is that restraint of trade?

12. When there are 20 available optical dispensaries in my area and in my judgement as an ophthalmologist I refer all patients to one because of superior quality, do all the other 19 sue me under Section 8 of this Bill, or am I compelled to divide the patients equally among all 20?

13. Since contact lenses cause many medical problems, some of which are serious enough to blind an eye; I am concerned about the welfare of my patients. Should this Bill become law, to whom do I turn for the answers to these questions?

Finally, we strongly support the position of Senator Hart and the American Medical Association in opposition to physicians accepting rebates from merchants or optical dispensaries, exploitation of patients, or other similar evils. We do not support S. 260, however. It would impose class, arbitrary, unrealistic, and impractical restrictions on physicians who seek to protect one of man's most precious gifts, his eyesight. We do not appreciate being placed in a position of fear, fear of what we may or may not do for our patients. We do not support a bill which requires us to make legal as well as medical judgements in our medical practice.

Mr. Chairman, Dr. Beitel and I wish to thank you for this opportunity of presenting the views of the American Association of Ophthalmology. We will now be pleased to attempt to answer any questions which the Committee may have.

"I always wanted my son to inherit the business, but the government beat him to it."



around the state

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Holdefer, Wilfred F., 1919 South 7th Avenue, Birmingham, Alabama 35233. (Jefferson County Medical Society).

Jumer, Margaret Mary, 700 South 19th Street, Birmingham, Ala. 35233 (Jefferson County Medical Society).

Lawaczek, Elmar Maria-Josef, 1919 South 7th Avenue, Birmingham, Ala. 35233 (Jefferson County Medical Society).

Malkoff, Donald Burton, 214 Medical Arts Building, Birmingham, Ala. 35205 (Jefferson County Medical Society).

Purvis, John Taylor, 909 South 18th Street, Birmingham, Ala. 35205 (Jefferson County Medical Society).

Ronderos, Alvaro D., 1919 South 7th Avenue, Birmingham, Ala. 35233 (Jefferson County Medical Society).

Sherlock, Eugene Chapman, 1919 South 7th Avenue, Birmingham, Ala. 35233 (Jefferson County Medical Society).

Tullos, Emmett Albert, Jr., 311 East Church Street, Jackson, Ala. 36545 (Clarke County Medical Society).

Yake, Ronald Favorite, 1529 North 25th Street, Birmingham, Ala. 35234 (Jefferson County Medical Society).

DEATHS

Baird, Glenn H., 619 South 19th Street, Birmingham, Ala. Deceased December 23, 1966. (Jefferson County Medical Society).

Caldwell, Edwin Valdiva, 604 Adams Street, Huntsville, Ala. Deceased. (Madison County Medical Society).

Cowsert, Elsie Jean, 2152 Airport Boulevard, Mobile, Ala. Deceased January 29, 1967. (Mobile County Medical Society).

Faucett, George L., Gadsden, Ala. Deceased January 22, 1967. (Etowah County Medical Society).

Killingsworth, Noah W., North Main Street, Brundidge, Ala. Deceased January 13, 1967. (Pike County Medical Society).

Moody, William James, P. O. Box 456, Satsuma, Ala. Deceased October 21, 1966. (Mobile County Medical Society).

Phillips, Frank Pond, 2751 Marcelus Drive, Mobile, Ala. Deceased October 23, 1966. (Mobile County Medical Society).

Ray, Weldon, 701 Belview Street, Bessemer, Ala. Deceased November, 1966. (Jefferson County Medical Society).

Salley, George W., Alabama Masonic Home, Route 4, Box 26, Montgomery, Ala. Deceased. (Escambia County Medical Society).

Taylor, Charter Howard, Parrish Road, Jasper, Ala. Deceased January 8, 1967. (Walker County Medical Society).

Thomas, Julius O., Eufaula, Ala. Deceased September 22, 1966. (Barbour County Medical Society).

CHANGE OF ADDRESS

Bernhard, Charles B., present Birmingham, Ala., to 113 Park Road, Pleasant Grove, Ala. 35127 (Jefferson County Medical Society).

Brandon, T. Earl, present Tuscaloosa, Ala., to 1300 McFarland Boulevard, Tuscaloosa, Ala. 35401 (Tuscaloosa County Medical Society).

Carter, Robert Walker, present Birmingham, Ala., to 3657 Spring Valley Road, Birmingham, Ala. 35233 (Jefferson County Medical Society).

Cobb, Sanford, present Anniston, Ala., to Chicago, Illinois. Moved out of state. (Calhoun County Medical Society).

Davis, Harwell Goodwin II, present Birmingham, Ala., to Lloyd Noland Hospital, P. O. Box 538, Fairfield, Ala. 35064 (Jefferson County Medical Society).

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Feulner, Charles D., present Selma, Ala., to Box 1128, Selma, Ala. 36701 (Dallas County Medical Society).

Fowler, Inez, present Birmingham, Ala., to Student Health Service, P. O. Box Y, University, Ala. 35486 (Jefferson County Medical Society).

Gedney, Leigh M., present Dothan, Ala., to 2873 Harcourt Drive, Decatur, Georgia 30033 Moved out of state. (Houston County Medical Society).

(Continued on Page 1060)



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- Holcomb, Maurice C., Jr., present Birmingham, Ala., to 1700 6th Avenue South, Irondale, Ala. 35210 (Jefferson County Medical Society).
- Holland, Claude M., Jr., present Birmingham, Ala., to 2101 Magnolia Avenue, Birmingham, Ala. 35205 (Jefferson County Medical Society).
- Karrh, Bruce W., present Winfield, Ala., to Doctors Building, Athens, Ala. 35611 (Marion County Medical Society).
- Kirkland, Theo N., Jr., present Birmingham, Ala., to 7714 Second Ave., South, Birmingham, Ala. 35206 (Jefferson County Medical Society).
- Leonard, Howard E., present Mobile, Ala., to 136 South Sage Avenue, Mobile, Ala. 36607 (Mobile County Medical Society).
- Miree, Aubrey S., III, present Birmingham, Ala., to Room 105 Wilson Building, 206 South Pine Street, Florence, Ala. 35630 (Jefferson County Medical Society).
- Moore, John W., present Selma, Ala., to 1227 West 20th Street, Laurel, Mississippi 39440 Moved out of state. (Dallas County Medical County Medical Society).
- Morgan, Perry A., present Birmingham, Ala., to Baptist Medical Center, 800 Montclair Road, Birmingham, Ala. 35213. (Jefferson County Medical Society).
- Penton, Robert S. B., present Montgomery, Ala., to 454 Valley Road, Fairfield, Ala. 35064. (Montgomery County Medical Society).
- Pigford, Malcolm L., present Birmingham, Ala., to West End Baptist Hospital, 701 Princeton Avenue, Birmingham, Ala. (Jefferson County Medical Society).
- Ray, Joseph Byron, present Mobile, Ala., to 179 Louiselle Street, Mobile, Ala. 36607 (Mobile County Medical Society).
- Snow, Robert L., Jr., present Tuscaloosa, Ala., to 1300 McFarland Boulevard, Tuscaloosa, Ala. 35401 (Tuscaloosa County Medical Society).
- Teague, Eldred B., present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala. 35205 (Jefferson County Medical Society).
- Underwood, James W., present Birmingham, Ala., to Baptist Medical Center, 800 Montclair Road, Birmingham, Ala. 35213 (Jefferson County Medical Society).
- Virgin, William B., present Montgomery, Ala., to 222 South Ripley Street, Montgomery, Ala. 36104 (Montgomery County Medical Society).
- Wilhite, Wilson C., Jr., present Birmingham, Ala., to Carraway Methodist Hospital, Birmingham, Ala. 35234 (Jefferson County Medical Society).
- Zenger, George H., present Birmingham, Ala., to West End Baptist Hospital, 701 Princeton Avenue, Birmingham, Ala. 35211 (Jefferson County Medical Society).

William L. Smith, M. D.
Secretary



Dr. J. O. Finney, Gadsden, President, clarifies a statement made in the Annual Report to the Board of Trustees.



Left to right: Dr. James E. Cameron, Alexander City, and Dr. Samuel J. Campbell, Birmingham, members of the Committee on Sub-committee Reports, discuss a statement of one of the reports prior to the Board of Trustees meeting January 18.



Dr. William F. Reynolds, President of the Montgomery County Medical Society, reminds members to attend the Annual Session, April 20-21-22. Sixteen foreign medical officers stationed at Maxwell AF Base on temporary duty were guests of the Society February 6.



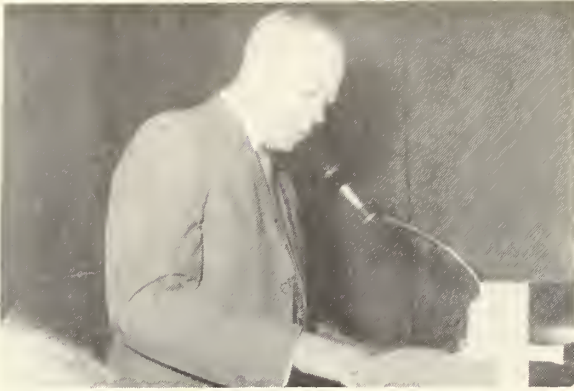
OFFICERS MEET SPEAKERS—Officers of the Alabama Society of Internal Medicine and the American College of Physicians talk with the banquet speaker. Left to right are: Dr. Howard Holley, ACP, Governor for Alabama, American College of Physicians; Dr. R. H. Kampmeier, FACP, President-Elect of the American College of Physicians and the speaker; Dr. R. Ross McBryde, Immediate Past President of the Alabama Society of Internal Medicine.



NEXT PAGE OF THE LEGISLATIVE REPORT READS . . . Trustee Dr. James G. Donald, Mobile, Chairman of the Legislative Sub-committee, carefully checks the Legislative Report.



Dr. Robert F. Parker, Montgomery, Chairman of the Board of Censors, answers one of the many questions asked by the military doctors regarding physicians at the Montgomery CMS.



Dr. Ellis F. Porch, Anniston, Chairman of Sub-committees, reads to the Board of Trustees, for their approval and recommendations, Reports of Sub-committee Chairmen January 18.



Board of Trustee Doctors L. B. Cooper, Elba, and H. G. Hodo, Jr., Fayetteville, look over the Sub-committee Report on Legislature prior to the January 18 Trustee meeting.



All Smiles . . . Dr. Paul Goldfarb, Mobile, on the left and Dr. James Parks, Montgomery, smile after being elected the new officers to the Alabama Society of Internal Medicine. Dr. Goldfarb is President-Elect and Dr. Parks is the Secretary-

Treasurer. Executive members not shown are: Doctors John Burnum and W. L. Hawley from Birmingham, and Ellis Sparks, Huntsville. The session took place at Point Clear with 75 physicians in attendance.



Speakers for the combined meeting of the Alabama Chapter, The American College of Physicians and The Alabama Society of Internal Medicine held at Point Clear, February 3, 4, 5 were, left to right: Dr. Clifton Meador, Dr. Allan G. Ramsay, Dr. Jean Morgan and Dr. Robert A. Kreisberg. All are from the Medical College of Alabama.



A group attending the meeting at Point Clear pay close attention to what the speaker is pointing out at one of the morning sessions.



Left to right: G. C. Long, Jr., Executive Director, Alabama Hospital Association, Montgomery, Alabama; Thomas M. O'Farrell (partially hidden), Associate Director, Hospital Continuing Education Project, Hospital Research and Educational Trust, American Hospital Association, Chicago, Illinois; Joseph F. Volker, D. D. S., Ph. D., Vice President for Birmingham Affairs, University of Alabama in Birmingham, Birmingham, Alabama; Matthew F. McNulty, Jr., Dean, School of Health Services Administration, University of Alabama in Birmingham, Birmingham, Alabama; Richard G. Allen, Director, Center for Hospital Continuing Education, School of Health Services Administration, University of Alabama in Birmingham, Birmingham, Alabama; Charles W. Flynn, Executive Director, Mississippi Hospital Association, Jackson, Mississippi.

Executive Board For Hospital Continuing Education Meets

The Executive Board of the Advisory Committee to the Center for Hospital Continuing Education, a division of the School of Health Services Administration, University of Alabama in Birmingham, held its initial semi-annual meeting at the Parliament House in Birmingham, Alabama, December 9 and 10.

Joseph F. Volker, D. D. S., Ph. D., Vice President for Birmingham Affairs, University of Alabama in Birmingham, Matthew F. McNulty, Jr., Dean, School of Health Services Administration, and Richard G. Allen, Director, Center for Hospital Continuing Education, were on hand to meet with members of the Executive Board.

The Board includes the executive directors of hospital associations in the states of Florida, Georgia, Kentucky, Louisiana, Mississippi, Tennessee and Alabama, representatives from the graduate programs in hospital administration at Georgia State College, the University of Florida and the University of Alabama. Also attending this meeting were Thomas M. O'Farrell, Associate Director, Hospital Continuing Education Project, Hospital Research and Educational Trust, Chicago, Illinois, and members of the faculty of

the School of Health Services Administration, University of Alabama in Birmingham—Professor Walter F. Robbins, Assistant Professor, and Keith D. Blayney, Ph. D.

The Center for Hospital Continuing Education was established early this year by a grant from the W. K. Kellogg Foundation to the Hospital Continuing Education Project of the Hospital Research and Educational Trust.

The meeting concerned itself with a review of the Center's programs to date, plans for future programs and the discussion of the Center's role in developing new and improved educational opportunities for hospital and health service personnel throughout the seven state region served by the Center.

The Center represents a unique experiment in educational program planning between state hospital associations, the American Hospital Association and university graduate programs in hospital administration under the guidance of educational planners at the University of Alabama in Birmingham.

Others in attendance were G. C. Long, Jr., Executive Director, Alabama Hospital Asso-

(Continued on Page 1066)



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN-SULFAS

Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

1. Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
2. Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.

ERYTHROCIN-SULFAS

Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701353

A clinical cure rate of 97.7%



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701359



(Continued from Page 1063)

ciation, Montgomery, Alabama; Charles J. Sweat, Assistant Chairman, Graduate Program in Health and Hospital Administration, University of Florida, Gainesville, Florida; George R. Wren, Director, Program in Hospital Administration, Georgia State College, Atlanta, Georgia; Glenn M. Hogan, Executive Director, Georgia Hospital Association, Atlanta, Georgia; Hasty W. Riddle, Executive Director, Kentucky Hospital Association, Louisville, Kentucky; Charles R. Gage, Executive Director, Louisiana Hospital Association, New Orleans, Louisiana; Charles W. Flynn, Executive Director, Mississippi Hospital Association, Jackson, Mississippi; and C. David Stringfield, Extended Care Project Director, Tennessee Hospital Association, Nashville, Tennessee.

Medical Science Advances

In medical science, 1966 might be characterized as the year of vaccines. A vaccine has been tested in more than 300 Rh-negative women and proved effective in preventing the dreaded Rh disease (erythroblastosis) in children of mothers whose red blood cells contain the Rh-negative antigen. A fetus with Rh-positive blood is endangered because the mother's Rh-negative blood forms destructive antibodies against it. A mumps vaccine proved nearly 100 per cent effective in clinical trials. Success was reported in developing a vaccine against group A Streptococci. The types and sub-types of the group are numerous, but the majority of serious strep infections are caused by the *Streptococcus pyogenes*, the beta hemolytic species making up group A. A vaccine against Strep—one of the last major bacterial pathogens to resist the efforts of vaccine makers—would be a great boon for preventive medicine. Work continued on a rubella (German measles) vaccine with high degrees of success reported in trials in human beings. Several years of experience in the use of a vaccine was stressed as the key to the ultimate eradication of the common red measles (rubella), usually associated with diseases of childhood. (News release, American Medical Association, Chicago)

P R O G R A M

of the

43rd Annual Convention

of the

WOMAN'S AUXILIARY

to the

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

APRIL 20-21

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43RD ANNUAL CONVENTION PROGRAM

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Associate Editor

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Typist

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Dr. Bryce Robinson,
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* * *

COMING MEETINGS

ANNUAL CONVENTION WOMAN'S AUXILIARY

TO THE

AMERICAN MEDICAL ASSOCIATION

Shelburne Hotel, Atlantic City, New Jersey

June 18-22, 1967

ANNUAL CONFERENCE

Drake Hotel, Chicago, Illinois—October 8-10, 1967

WOMAN'S AUXILIARY

to the

SOUTHERN MEDICAL ASSOCIATION

November 13-16, Eden Roc Hotel,

Miami Beach, Florida

PROGRAM
for the
STATE CONVENTION

April 20-21, 1967

WEDNESDAY, APRIL 19, 1967

2:00-5:00 P. M.—Pre-convention registration, Whitley Hotel Lobby—Registration Fee—\$2.00

Archives and Exhibits entries accepted until deadline Thursday, April 20th at 4:00 P. M. Displays on view and received in Lounge.

THURSDAY, APRIL 20, 1967

8:00 A. M.-3:00 P. M.—Registration, Whitley Lobby—Registration Fee—\$2.00

8:00 A. M.—Pre-convention board meeting—Dutch Breakfast—Whitley Hotel State Room. (Price \$2.55)

9:00 A. M.—First General Session—Civic Room, Whitley Hotel

Call to Order—Mrs. Ira B. Patton
Invocation—Mrs. Frank Miles, Montgomery
Auxiliary Pledge—Mrs. Jack Till, Montgomery
Welcome—Mrs. Walker Sorrell, President, Montgomery County Auxiliary

Introduction of Guests—Mrs. Patton
Mrs. C. Tolbert Wilkinson, President, Woman's Auxiliary to the Southern Medical Association
Convention Rules of Order—Mrs. W. R. Sutton, Blountsville

Parliamentarian—Mrs. W. R. Sutton, Blountsville
Report of Reading Committee—Mrs. Robert Gillman, Gadsden

First Report of Credentials Committee—Mrs. W. L. Smith, Montgomery

Annual Report of Officers (Two minutes is all your time—otherwise a bell will chime.)
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President-Elect—Mrs. J. C. Guin

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Talladega—Mrs. Arthur F. Toole
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Colbert—Mrs. Archie Carmichael
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Lamar—Mrs. W. C. Box

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Limestone—Mrs. Frank M. Cauthen
Marion—Mrs. J. G. Brooks
Morgan-Lawrence County—Mrs. Rhett G. Danley
Pickens—Mrs. J. H. Gentry
Tuscaloosa—Mrs. Peter Trice
Walker—Mrs. Robert E. Ray

11:00 A. M.—First Report of Nominating Committee—Mrs. John Kimmey Elba
Announcements—Mrs. Edwin Webb
Memorial Service—Mrs. I. W. Bankston

RECESS

12:30 P. M.—Reception Honoring Mrs. C. C. Long, National Vice President and Mrs. Wilkinson, SMA President—Blue-Gray Room—Whitley Hotel

1:00 P. M.—Luncheon—Fashion Show by Miller's of Normandale
Invocation—Mrs. Frank Miles
Introduction of Guests—Mrs. Patton
Address—Mrs. Long

3:00 P. M.—Board buses at Whitley Hotel to view exhibit of antique automobiles of Mr. Royce Kershaw

4:00 P. M.—Tea at State Headquarters Building, Medical Association of the State of Alabama, 19 South Jackson Street—Guests of Board of Censors and Board of Trustees.

5:00 P. M.—Buses return to Whitley Hotel.

7:00 P. M.—Reception, Buffet Dinner and Dance
Hosts—Medical Society of Montgomery County
Jefferson Davis Hotel

FRIDAY, APRIL 21, 1967

8:00-12:00—Registration, Whitley Hotel Lobby—Registration Fee—\$2.00

Breakfast—everyone is on her own—get up early for the meeting!

8:30 A. M.—Second General Session—Civic Room
Call to Order—Mrs. Patton

Invocation—Mrs. W. R. Sutton

Introduction of Guests—Mrs. Patton

WASAMA Representative—Mrs. Edwin Crouch, Birmingham

Annual Report of Officers (continued):

SOUTHEAST DISTRICT—Mrs. Morgan J. Moore
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Covington—Mrs. Wheeler A. Gunnels
Dale—Mrs. Taylor Coffey
Elmore-Tallapoosa—Mrs. Gunter Owsley
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Montgomery—Mrs. Walker Sorrell
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(Continued on Page 1072)



"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"



The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE[®] LP



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis

43RD ANNUAL CONVENTION PROGRAM

(Continued from Page 1069)

SOUTHWEST DISTRICT—Mrs. G. William Wiles
 Baldwin—Mrs. L. E. Rockwell
 Dallas—Mrs. Robert J. Henderson
 Mobile—Mrs. Frank T. England
 Historian—Mrs. William Noble
 Second Report of Credentials Committee—
 Mrs. W. L. Smith
 9:10 A. M.—New Business
 Recommendations from Executive Board—
 Mrs. Patton
 Revisions—Mrs. John Kimmey
 Presentation of Budget—Mrs. J. P. Brooke
 Election of 1967-68 Nominating Committee
 Report of Nominating Committee—
 Mrs. John Kimmey
 Election of Officers
 Installation of Officers—Mrs. W. G. Thuss, Sr.
 Presentation of President's Pin and Gavel—
 Mrs. Patton
 Inaugural Address—Mrs. J. C. Guin
 Introduction of Committee Chairmen for 1967-68—
 Mrs. J. C. Guin
 Announcements—Mrs. Edwin Webb
 RECESS

10:00-12:00—Post-convention Workshop—Mrs. J.
 C. Guin, Presiding—Civic Room

12:30—Alapac Luncheon—Jefferson Davis Hotel
 Address—Mrs. Wilkinson

AMA-ERF Awards—Mrs. B. H. Johnson

Archives and Exhibits Awards—Mrs. Luther Hill

Announcements—Mrs. J. C. Guin

Adjournment—Mrs. Ira B. Patton

Hospitality and Exhibit Room—Lounge—Whitley
 Hotel

Thursday 9:00 A. M.-4:00 P. M. (closed for lunch-
 eon)

Friday 9:00 A. M.-4:00 P. M. (closed for luncheon)

7:00 P. M.—Reception, Buffet Dinner and Dance
 Host—Scroll and Key Club
 Jefferson Davis Hotel

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LUNCHEONS

Thursday, April 20

Mrs. John Pickering (Barbara) 263-1354
 3585 Bankhead Ave.
 (Jefferson Davis Hotel)

Mrs. John Webb (Cecile) 265-3280
 3725 Princeton Drive
 (Whitley Hotel)

Friday, April 21—Alapac Luncheon

Registration

Mrs. O. L. Burton (Norma) 265-7586
 3353 Boxwood Drive

Mrs. W. H. Chambless (Billie Ruth) 264-6523
 3507 Southview Avenue
 (Montgomery County Reservations)

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 962 Green Forest Drive

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 2240 Allendale Place

Protocol

Mrs. Harry J. Till (Helen) 264-7382
 3320 Allendale Place

To Label or Not to Label

In a less sophisticated era, when the art of medical practice outweighed scientific knowledge, physicians did not tell their patients the identity of the medications they prescribed. Today, this practice is being gradually abandoned, and increasing numbers of physicians ask pharmacists to indicate on the label the names and strengths of the drugs they prescribe. The Council on Drugs believes that all physicians should adopt this policy, and make an exception only when such disclosure would be detrimental to the welfare of the patient. In a prior discussion of this subject,¹ the Council made a number of the following points:

The patient has the right to be informed about his illness and the medications prescribed.

In emergency situations, such as accidental poisoning, overdosage, or attempted suicide, immediate identification of a prescription drug from the label may be lifesaving.

The information is invaluable when the patient changes physicians, moves to another locality, or contacts the prescribing physician at a time when his records are not readily available.

The information on the label is of value in group practices in which the patient may not always have the same attending physician.

It is advisable that patients with allergies know what is being prescribed.

This specific information on the label helps to prevent mix-ups between two or more drugs being taken concurrently, or between medications being taken by different members of the family.

Should it become necessary to issue a warning against the use of a particular drug, the name on the label serves as a danger signal to those who have been given prescriptions for the product.

In its earlier consideration of this subject,

the Council on Drugs passed the following resolution¹:

The Council resolves that it favors labeling of prescriptions as a general practice, and furthermore, it is recommended that prescription pads contain boxes for a "yes" or "no" on whether to label; if these boxes are not filled in by the physician, the prescription will be labeled.

That resolution was received favorably by many. However, pharmacy organizations and several state medical societies have opposed the method that the Council suggested for implementing its recommendation. The Professional Relations Committee of the American Pharmaceutical Association agreed with the position expressed by Apple and Abrams,² who concluded that unless a prescriber specifically requests labeling, "... a pharmacist should not by himself, or upon request by a patient, disclose the ingredients in the prescribed medication by labeling." This reflects the feeling of the pharmacist that he needs a directive to label from the physician, who alone has the authority to make such a decision.

Physicians and pharmacists who are opposed to labeling as a routine measure and feel that it may create or accentuate various problems have the following objections:

The practice may lead to self-medication and to "patient-prescribing" for others.

A patient who knows the drug name may compare prices at different pharmacies, and thus tempt pharmacists to bid for business on a price basis rather than on a basis of professional service.

The information may only confuse and trouble the patient.

The practice reduces the stature of the physician and lowers the status of the prescription to practically that of an over-the-counter item.

Patients may put other drugs into bottles labeled with the previous contents, which

may then lead to charges that a pharmacist dispensed the wrong medication.

Labeling could make it easier to channel drugs into illegal markets.

The Council believes that the advantages of labeling outweigh these objections in almost every instance; the Council always has recognized that there are occasions when such labeling is inadvisable for psychological or other reasons, and that the physician is the one who must decide.

However, only in exceptional circumstances is it desirable not to reveal the identity of prescribed drugs under today's conditions. Moreover, the physician's explanation to his patient regarding the purpose of a prescribed drug and what may be expected from it, together with the public's growing awareness of the effects of drugs—both beneficial and harmful—will help to minimize problems that may occur occasionally.

After consultation with officers of the national pharmacy organizations and after further deliberation, the Council on Drugs strongly reaffirms its position that in the best interest of the patient the prescription container should, as a rule, be labeled with the name and strength of the drug. To implement this recommendation, the Council suggests that the physician use two sets of prescription blanks, one of which is for routine use and is imprinted with an order to label. This procedure is consonant with the ethics of medicine and pharmacy, and with the physician's responsibility to decide whether the prescription label should or should not identify the drug.

The Council further urges that the physician always designate the number of refills he wishes the patient to have, and that he prescribe only the number of doses usually required in any specific condition, since adjustments in dosage are often necessary to obtain the desired result in individual cases. The Council also recommends than any pre-

scription that does not indicate the number of refills, or that is labeled "p.r.n." or "ad lib," not be refilled.

The Drug Abuse Control Amendments that were recently passed by the Congress regulate the refilling of prescriptions for stimulant and depressant drugs. No prescription for drugs in these classes can be renewed more than five times, or more than six months after the date of issue unless the physician gives additional authorization for refilling.

The physician's responsibility for the medication regimen of his patient is clear, and he should therefore heed the pharmacist's requests for specific instructions on renewals.

The Council hopes that this statement will clarify its position on the question of labeling and refilling of prescription drugs, and earnestly solicits the cooperation of physicians, pharmacists, and other health personnel in implementing these important public health recommendations.

References

1. Labeling of Prescription Drugs, editorial, JAMA 185: 316 (July 27) 1963.
2. Apple, W. S., and Abrams, R. E.: Problems in Prescription Order Communications, JAMA 185: 291-293 (July 27) 1963.

**Mark Your Calendar Now
To Attend The
ANNUAL SESSION
Jefferson Davis Hotel
Montgomery, Alabama
A P R I L
20-21-22, 1967**

Rare Blood Transfusion Saves Infant

Mrs. Pearlle Williams can take a healthy, newborn baby home from the Bronx-Lebanon Hospital today thanks to a new technique of preserving rare blood by freezing in liquid nitrogen at -320°F . The process was developed at The New York Blood Center by Dr. Arthur W. Rowe.

On Tuesday evening, January 10th, a call was received by Dr. Aaron Kellner, Director of The New York Blood Center, from the hospital seeking a compatible blood for Mrs. Williams' 4-day old baby boy whose cells were being destroyed by exposure to antibodies from the mother. This breakdown of cells, if not retarded before it reaches a critical level, results in brain damage or death.

When Dr. Kellner received the call from Bronx-Lebanon Hospital, he requested a sample of the baby's blood which was typed and then identified as U-positive. It was determined that the infant needed a transfusion of U-negative blood, the same type as the mother's but without the antibodies which her blood had contained. A search of the Center's frozen inventory turned up a compatible unit of the rare U-negative, a type which is found once in a thousand cases. It was thawed at the Center and within two hours after the request was made, the life-saving exchange transfusion was underway before the critical period was reached.

The successful transfusion was accomplished through the use of U-negative blood which was collected and frozen last December at The New York Blood Center after having been identified during a routine blood screening for rare types. The U-negative unit was immediately frozen in liquid nitrogen for long-term preservation. The process has been developed by Dr. Rowe with research funds provided by the National Heart Institute and the Union Carbide Corporation.

This is the first time that an exchange transfusion of this type has been made using

the deep-frozen, rare blood registry developed at The New York Blood Center. According to Dr. Kellner, "we hope to expand the services resulting from our scientific research on frozen blood to such an extent that both rare and common types of blood will in the near future be available to the community on a regular basis."

Italian Health Minister Thanks Winthrop For Medical Supplies

The "heartfelt thanks" of the Italian Minister of Health have been conveyed to Winthrop Laboratories in appreciation of the pharmaceutical manufacturer's emergency shipment in November of an important antibacterial medical product to help prevent the spread of infection in flood-ravaged Italy.

Minister Luigi Mariotti's acknowledgment of the free "mercy" shipment was received by Anthony Mazzaca, director of Winthrop's office in Milan. It was then relayed to Dr. Theodore G. Klumpp, president of Winthrop, at the firm's world headquarters in New York City.

The message read:

"Having been touched by your generous gesture of human solidarity towards the people hit by the recent floods, I would ask you to please convey to your Company my deepest feelings of gratitude and deep appreciation.

"I send to you personally my heartfelt thanks and my very best regards."

Winthrop, a division of Sterling Drug Inc., dispatched 100,000 units of pHisoHex to the Italian Red Cross for use in Florence, the hardest-hit city, and other communities stricken by the unprecedented flash floods. pHisoHex is an antibacterial, antiseptic skin cleansing agent used in hospital operating rooms, and nurseries as well as in the home.

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

March, 1967

No. 9

Stroke Mechanism In Carotid Occlusive Disease*

J. Garber Galbraith, M. D.⁺

Birmingham, Alabama

Introduction:

Carotid endarterectomy is now an accepted method of treatment in certain cerebrovascular disorders.¹ Proper selection of cases for this procedure requires full awareness of the many complexities of cerebrovascular disease if the pitfalls of inadequate diagnosis and disastrous complications are to be avoided. Adequate history, neurological evaluation and complete arteriographic depiction of the cerebral vascular tree are essential to proper management. In addition, there is need for an awareness of the factors which regulate cerebral blood flow and their modifications, in order to properly select cases for endarterectomy and in order to prevent disabling complications and sequellae of the lesions and of the surgical treatment.

There are those who question the significance of extracranial stenotic lesions in pro-

duction of stroke. It has been pointed out that atherosclerosis of the carotid and vertebral arteries occurs commonly in older people, frequently existing without clinical evidence of cerebral vascular disease. Conversely, cerebral infarction occurs in some cases without clinical evidence of atherosclerosis. In other cases, there is poor correlation between existing vascular lesions and the cerebral involvement demonstrated clinically or at autopsy. These are among the apparent discrepancies which might lead one to question the significance of extracranial occlusive disease.

An additional paradox is exemplified by carotid ligation for control of certain intracranial vascular disorders. This is usually accomplished without any detriment to the patient although the inherent risk of cerebral ischemia is recognized. The fact that carotid ligation is often well tolerated and may, in certain cases, have beneficial effects, might lead one to question the advisability or propriety of surgically re-establishing the patency of a carotid artery which has become occluded by atheroma. Carotid ligation (or atheromatous occlusion) is usually well toler-

*Presented at Clinical Congress, American College of Surgeons, San Francisco, October 11, 1966.

⁺From the Department of Surgery, Section on Neurosurgery, University of Alabama Medical Center.

Supported by USPHS Grant HE 04943.

ated so long as the collateral circulation is adequate. It is thus obvious that factors which impair collateral flow share importance with the carotid lesion in production of stroke. Awareness of these factors is essential in the evaluation and treatment of each case of cerebrovascular disorder.

In order to evaluate the significance of extracranial occlusive disease in relation to stroke, it is desirable to consider the factors which normally contribute to the maintenance and control of cerebral blood flow, as well as modifications of these factors by certain pathological changes.

The Auto-Regulation of Cerebral Blood Flow

The significant factors involved in the regulation of cerebral blood flow under normal conditions are as follows: (1) Blood pressure, (2) Physical state of arterial wall (caliber, tone, smoothness of intima), variables which together constitute the sum total of resistance to blood flow in the brain or cerebrovascular resistance (CVR). (3) Chemical factors (chiefly O_2 and CO_2 tensions in blood and brain tissue). These represent a regulatory mechanism based on the metabolic demands of the brain. (4) The viscosity of the blood, and (5) Neurogenic control (probably negligible).

In the normal state, total cerebral blood flow remains constant despite wide fluctuations in blood pressure (range 250-60 mm. systolic).² This is accomplished by altering the cerebrovascular resistance through muscular contraction or relaxation at the arteriolar level in response to intravascular tension. This is thought to be a direct effect on the smooth musculature of the arteriolar wall by intraluminal pressure.

Chemical control of cerebral blood flow is largely based on the metabolic needs of the brain and again is probably effected through vasodilatation at the arteriolar level. Carbon dioxide tension of blood and brain, to a lesser extent O_2 tension, are the principal factors involved.

Pathological Studies on Atherosclerosis of Extracranial and Intracranial Vessels.

Analysis of autopsy material indicates that atherosclerosis of extracranial and intracranial distribution may be entirely asymptomatic. At the other extreme, cerebral infarction has been observed without evidence of atherosclerosis, and this is usually explained on the basis of embolic phenomena or terminal artery occlusion. Of these, the embolic mechanism seems more plausible. Another possible mechanism is an inadequacy of cerebral blood flow with resultant anoxia, of sufficient duration to produce infarction, without actual occlusion or thrombosis.

Cerebral infarction is associated in the majority of cases with a combination of extracranial and intracranial atherosclerosis. Less frequently infarction has been observed with extracranial atheroma alone.

It has been noted in one autopsy study that cerebral infarction associated with atheroma of the extracranial vessels was also usually associated with the presence of anomalies of the circle of Willis. This is felt to result in a compromise of the collateral circulation. This has further been offered as an explanation for the apparent disparity between the distribution of the vascular occlusive lesions and the cerebral symptoms. The following pathological factors seem to be significant in the determination of the neurologic deficit: (1) Occlusion of an extracranial vessel, (2) Occlusion of cerebral arteries (and/or collaterals), (3) Stenosis of other extracranial arteries to the brain in addition to the primary extracranial occlusion, (4) Anomalies of the circle of Willis (by compromising collateral flow). (5) Embolic phenomena; platelet emboli or cholesterol plaques may arise from the stenotic area. The occurrence and extent of cerebral infarction after carotid occlusion is largely dependent upon the presence of one or more of these additional anatomical factors in association with the stenosis.

With stenosis of one or more main arteries of the brain, the following alterations of normal regulatory control of cerebral blood flow

have been elucidated: (1) Loss of autoregulation with blood pressure fluctuation after occlusion of one carotid artery. Thereafter, there is a linear relationship between systemic blood pressure and cerebral blood flow, requiring maintenance of adequate blood pressure to sustain cerebral circulation. While an occlusive lesion with an 85 per cent or 90 per cent reduction of the cross-sectional area of the artery may not result in diminished cerebral blood flow with normal blood pressure, if the blood pressure is reduced, then this lesion may become a determinant of cerebral ischemia. The dynamics of the circulation must be assessed as well as the static factor of stenosis in the development of cerebral symptoms. (2) A second factor is impaired response to chemical control. Increased concentration of carbon dioxide in tissue and blood no longer induces the usual large increment in cerebral blood flow, the response being of much lesser degree. (3) Anatomical variations in the circle of Willis exist in a fair percentage of cases and result in various types of compromise of collateral circulation. (4) In response to reduced cerebral blood flow there is an increased oxygen uptake by brain tissue resulting in a widening of the A-V O_2 difference. However, with progressive reduction of cerebral blood flow this mechanism fails; the oxygen uptake then diminishes. (5) The intracranial pressure is another factor in the control of cerebral blood flow, and when markedly elevated, results in reduction of cerebral circulation. However, this is not usually a consideration with occlusive cerebral vascular disease per se.

Thus, a stenotic lesion of the carotid may be asymptomatic until one or the other variable is modified. The same variable may not be the critical factor in infarction in every case. As each of the regulatory factors in normal cerebral blood flow becomes inoperative, additional stress is applied to the remaining factors while at the same time, the margin of safety (or reserve) is impaired. Thus a disturbance of the remaining regulatory factor which under normal circum-

stances would be well within the limits of tolerance may now evoke an inadequate response and resultant inadequacy of cerebral blood flow. The prime factors in this process appear to be (1) blood pressure, (2) the caliber of the arteries (atheroma), (3) cerebral vasomotor tone (arteriolar tone controlled by intraarterial pressure and by CO_2 tension), and, (4) collateral circulation via the circle of Willis (anatomical variations). Thus a disorder of any of these factors may be compensated by the other three provided there is no compromise of these remaining factors. However, if the remaining factors are impaired, there may no longer be an adequate reserve or margin of safety, thereby resulting in cerebral ischemia or infarction.

The Significance of Effective Pulsatile Blood Flow and

The Influence of Energy Equivalent Pressure

Emphasis has been placed on the fact that arterial occlusive lesions must produce approximately 85 per cent to 90 per cent reduction of cross-sectional intraluminal area before there is any appreciable reduction in distal pressure or blood flow. A concept which has not received consideration, however, concerns the effect of lesser degrees of stenosis upon the character of the pulse wave and the quality of the pulsatile flow. Experimental evidence indicates that these factors may be affected appreciably at an earlier stage in the progress of the stenotic lesion.³

The total hemodynamic energy per ml of blood passing a given arterial cross section can be calculated from phasic flow and pressure measurements and expressed as energy equivalent pressure in millimeters of mercury (EEP). For example, measurement within the femoral artery may indicate an energy equivalent pressure of 131 ml of mercury with a mean arterial pressure of 94 ml of mercury. The difference of 37 ml of mercury represents energy excess of pulsatile

flow pattern compared to steady flow at the same mean pressure and mean flow.

Further evidence indicates that energy equivalent pressure of pulsatile flow represents energy directed to the maintenance of tissue perfusion, this perfusion being perhaps more effective at the same level of mean pressure and mean flow than non-pulsatile flow.

The difference between EEP and MP has been found to be highly variable in different physiologic states. Arterial pressure pulse undergoes characteristic change in vascular disease.

These observations suggest the possibility that lesser degrees of stenosis not sufficient to reduce blood flow or mean pressure may modify the character of the pulsatile flow so as to impair the efficiency of peripheral tissue perfusion. Stated another way, blood passing such a lesion might maintain the same pressure but not be as efficient in perfusing the brain tissue as blood with normal pulsatile flow pattern.

This concept is intriguing but whether it may be added to the list of factors concerning regulation of cerebral blood flow with extracranial arterial stenosis cannot at this time be stated with certainty.

Summary

The *modus operandi* of extracranial occlusive disease is neither simple nor direct. Collateral circulation maintains adequate

cerebral blood flow until or unless additional factors become operative. The more significant of these are inadequate blood pressure, additional stenotic lesions, extracranial and/or intracranial, embolic phenomena, anomalies of the circle of Willis, and increased viscosity of the blood.

Current methods of investigation are not sufficiently refined to allow precise definition of the sum total of factors which quantitatively will inevitably result in cerebral infarction. It is also possible that other factors such as energy equivalent pressure of pulsatile flow, as yet poorly defined, may be of significance in this process.

The inability to succinctly define the mechanisms of production of cerebral infarction in association with extracranial occlusive disease should not be construed as a contraindication to surgical correction of such lesions. It does, however, point up the need for further studies in this vital area, and for continued critical evaluation of every case for which surgical measures are contemplated.

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APRIL 20-21-22, 1967

The Epidemiology of Carotid Stenosis^{1, 2}

James H. Halsey, Jr., M. D.³

Sherman C. Raffel, Ph. D.⁴

Theodore D. Lampton, M. D.⁵

The cerebrovascular diseases comprise the third most common cause of deaths in the United States and as such are a problem of epidemiologic magnitude. The success of any attempts at prevention, detection, and treatment can only be judged in the context of a thorough understanding of their natural histories, before as well as after they produce symptoms. Some data are now available from completed and ongoing studies.

Ischemic infarction of the brain is certainly associated with aging. Eisenberg et al (1964) studying the Middlesex County, Connecticut, population, found an incidence under one per 1000 patients per year in the age group 45-54, nearly four per 1000 in patients 65-74 and nearly 30 per 1000 in those over 85. Nearly 5 per cent of patients suffering an ischemic infarction had another within a year.

Several studies have shown a relationship between hypertension and cerebral thrombosis, and this has been evident in the ongoing Framingham prospective study (Kan-

nel et al 1965). It appears that hypertension is of much greater importance in the development of cerebral atherosclerosis than it is for coronary and peripheral vascular disease. By contrast, hypercholesterolemia seems less significant and may only be important if present before age 50. Hyperuricemia (Meyer et al 1964) and hypertriglyceridemia (Feldman and Albrink 1964) may also be relevant.

Notwithstanding rapid and remarkable advances in the neurologic sciences we remain in a primitive state in our ability to identify the asymptomatic individual who is likely to suffer a catastrophic brain insult. In the patient with recurrent episodes of hemiparesis and dysphasia the diagnosis of transient ischemic attacks is relatively easy and obvious but the multitude of patients with episodic dizziness, light headedness, and "blind staggers" are real dilemmas for the conscientious clinician. Moreover, the natural history of transient ischemic attacks though often benign may sometimes be catastrophic; and more than 70 per cent of patients suffering cerebral infarction have had no prodromal symptoms (Kannel 1965).

Having once determined to subject the patient to the small but significant risk of angiography there is no great certainty of the significance of arterial lesions demonstrated. Faris et al (1963) found definite arterial lesions in 30 per cent of asymptomatic prisoner volunteers aged 40-60 subjected to four vessel angiography. Similar lesions were found in 60 per cent of symptomatic patients in the same age range.

Short of angiography, some cases of extracranial arterial stenosis are indicated by sharply localized bruits over the carotid or

1. From the Division of Neurology, Department of Medicine, the Department of Public Health and Epidemiology, and the Birmingham Stroke Project, University of Alabama Medical Center, Birmingham.

2. This investigation was supported, in part, by research grant No. RD 1795-M from the Vocational Rehabilitation Administration, Department of Health, Education, and Welfare, Washington, D. C.

3. Assistant Professor of Neurology.

4. Assistant Professor of Public Health and Epidemiology, and Project Coordinator, Birmingham Stroke Project.

5. Fellow in Medicine, University of Alabama Medical Center, Birmingham.

subclavian arteries, or occasionally over the eyes. Additional cases can be identified by the indirect methods of measurement of distal internal carotid artery pressure, either by measurement of retinal artery pressure, arm to retina fluorescein circulation time, or the recently introduced technique of thermography measurement of skin temperature of the medial forehead, which is supplied by the supraorbital branch of the ophthalmic artery (Wood 1965, Austin and Sajid 1966). In an ongoing study of patients selected for carotid endarterectomy at the University of Alabama Medical Center, we have found either a significant bruit or a thermographic abnormality, or both, in most cases with greater than 60 per cent stenosis. This result of course is probably biased by the fact that patients with bruits are more likely to be referred for angiographic study however.

In order to gather information about the natural history of the cerebrovascular diseases, before and after they cause symptoms, an epidemiologic survey of the Birmingham population was begun recently. The purpose of this report is to describe the goals and methods of this study, and to present some preliminary data relevant to the occurrence of carotid artery stenosis as inferred by the presence of bruits, and of thermographic abnormalities utilizing the technique of Austin and Sajid (1966).

This project is a five year prospective epidemiologic study of cerebrovascular disease. The project was launched in May, 1965, with a pilot study in a smaller neighboring community. The purposes of this pilot study were (1) the construction of a suitable health questionnaire for the investigation of risk factors relating to cerebrovascular disease, (2) training of interviewers in proper techniques of health interviewing, (3) developing criteria for physical examination which would further relate to risk factors, (4) studying and developing the methods by which large amounts of health data can best be recorded, stored, and processed and (5) consultation with other agencies investigating chronic disease for the purpose of general

staff development, improved techniques and methodology.

It is the plan of the epidemiology study to interview during the five year period a stratified random sample of 10,000 residents between the ages of 50-69 who live within the Birmingham city limits. Currently, the interviewing is proceeding at the rate of 2,500 per year in order to provide the goal of 10,000.

The questionnaire, administered by lay interviewers, elicits symptoms and history of factors known or presumed related to the development of arterosclerotic cerebrovascular disease: hypertension, coronary artery disease, diabetes, obesity, intermittent claudication, etc. By the absence of these factors the subject is classified "not stroke prone." If one or more are present he is classified "stroke prone." In addition, if symptoms are elicited suggestive of transient cerebral dysfunction—hemiparesis, blindness, speech disorders, diplopia, vertigo, etc.—if recurrent, with complete recovery, the subject is classified as suffering transient ischemic attacks. Finally, a history of severe cerebral dysfunction with incomplete recovery, e.g. hemiplegia, classifies the subject as "completed stroke."

As a check on accuracy of data obtained by the questionnaire, 30 per cent of subjects classified in each group by the lay questionnaire—not stroke prone, stroke prone, transient ischemic attacks, and completed stroke—have detailed history and physical examination by an internist, as well as the following relevant laboratory studies: chest X-ray, EKG, two hours post prandial blood sugar, cholesterol, uric acid, PBI, hematocrit, triglycerides, urinalysis, and thermography.

As a final check on accuracy of diagnostic classification, equal numbers of each group, comprising three per cent of the survey population, are re-examined by a neurologist and have an EEG.

The response rate both to the interview and the examinations has been gratifying. Less than two per cent refuse to be inter-

viewed, and nearly 80 per cent have responded favorably to the clinical examinations. Repeat interviews and follow up examinations on all those previously examined or interviewed are to be done annually. All findings of this study are made available to the subjects' private physician or medical agency, if release of information is authorized. Each co-operating physician is requested to advise the Project as to the status of the subject concerning the onset of cerebrovascular problems.

The annual follow up examination is one of the crucial parts of the study, as this will provide information as to the actual onset of cerebrovascular disease in any of its varied manifestations. Additional follow up data are also to be acquired through reports from private physicians, hospitals, public medical agencies, and health department death certificates.

The goals of the epidemiologic survey are:

(1) To develop a valid and reliable health questionnaire, administered by non-medical personnel, which has the capability of detecting early prodromes of cerebrovascular disease in large population surveys.

(2) To collect data bearing on the incidence, prevalence, and natural history of the cerebrovascular diseases.

(3) To develop physical examination techniques including laboratory and radiologic data which will detect early symptoms of a neurologic, biochemical or vascular nature, not already in the body of medical knowledge, and to give them a statistical basis.

(4) To discover the relationship between clinical observations of known pathological conditions and evaluations of laboratory indicators to the onset, type, and severity of cerebrovascular disease. This includes the contribution of such conditions as diabetes, hypertension, peripheral vascular disease, obesity, thyroid disorders, gout, coronary artery disease, hypercholesterolemia, and other hyperlipemias.

(5) To discover the contribution of such variables as family history of stroke, use of

alcohol and tobacco, vocational history, general stress, childbirth in females, racial and socio-economic factors.

(6) To find sufficient ways of objectifying clinical data to be able to report results in terms of meaningful statistical criteria, which can be compared with similar reports from other studies.

Results: 1371 subjects have been interviewed with the lay questionnaire. Of these, 311 have been examined by an internist and 28 by a neurologist. The diagnostic classifications are listed in Tables 1 and 2, and show the overall per cent classification derived from the questionnaire and the internist's examination. There was an overdiagnosis of symptomatic cerebrovascular disease by the questionnaire.

Table 3 shows the occurrence of extracra-

	Questionnaire	Internist
Not Stroke Prone	158 (51%)	181 (57%)
Stroke Prone	101 (32%)	104 (33%)
Transient Ischemic Attacks	38 (12%)	16 (5%)
Completed Stroke	14 (5%)	10 (3%)

Table 1. Diagnoses by internist history and examination in 311 subjects compared with lay questionnaire results for the same subjects.

	Neurologist	Internist	Questionnaire
Not Stroke Prone	10	10	7
Stroke Prone	9	9	9
Transient Ischemic Attacks	2	4	6
Completed Stroke	7	5	6

Table 2. Diagnoses in 28 subjects examined by neurologist, internist and lay questionnaire.

	Bruits (carotid & subclavian)	Thermography
Not Stroke Prone	7	16
Stroke Prone	16	11
Transient Ischemic Attacks	4	3
Completed Stroke	1	3

Table 3. Signs of extracranial arterial stenosis in the 311 patients examined by internist.

nial vascular stenosis as indicated by the presence of carotid and/or subclavian bruits, and by significant thermographic abnormalities. If the 311 patients examined be accepted as a representative sample of the Birmingham population between ages 50-69, the prevalence of completed stroke (mostly ischemic) is 3.2 per cent and of symptomatic cerebrovascular disease 8.3 per cent (including completed stroke and transient ischemic attacks).

Although a first glance at the figures for bruits and thermography might indicate that carotid stenosis is more frequent among asymptomatic subjects it should be remembered that asymptomatic subjects in the total sample are far more numerous (Table 1). It can be seen that bruits were present in 23 of 285 subjects with no symptoms of cerebrovascular disease (8 per cent) but in five of the 26 with symptoms (19 per cent) thermographic abnormalities were found in 27 of the 285 asymptomatic subjects (9.5 per cent), and in six of the 26 with symptoms (23 per cent). Thus, these signs of extracranial arterial stenosis are about twice as common in symptomatic individuals as in those who have no symptoms of cerebral dysfunction.

Discussion: The overdiagnosis of symptomatic cerebrovascular disease by the lay questionnaire is probably due to a misconception on the part of the respondents, and an overemphasis in the questionnaire of the significance of non-specific transient symptoms such as dizziness and nervousness, and commonly misused terms like "nervous shock" which almost always reflect psychiatric rather than neurologic disease. A review of our cumulative experience is in progress to improve the specificity of the questionnaire in this regard.

The occurrence of signs of stenosis of the major cervical arteries in nearly ten per cent of asymptomatic subjects correlates with the angiographic study of Faris et al (1963) mentioned in the introduction. It will be of interest and considerable importance to deter-

mine the subsequent course of those subjects in the long term follow-up program of this study. Although it is a worthy surgical aphorism that open arteries are better than occluded ones, the ultimate occurrence of a cerebral infarction must depend on a complex and dynamic interaction of metabolic, hemodynamic, and structural factors. The ultimate valid test of "stroke proneness" is not some laboratory result or physical finding, not the considered opinion of the neurologist, not even the objective demonstration of angiography. The final test will be which of these subjects have strokes and which do not.

Summary: In a prospective survey of the Birmingham population aged 50-69, clinical signs of carotid and/or subclavian artery stenosis were present in nearly ten per cent of asymptomatic subjects. They were about twice as frequent in subjects with symptoms of cerebrovascular disease.

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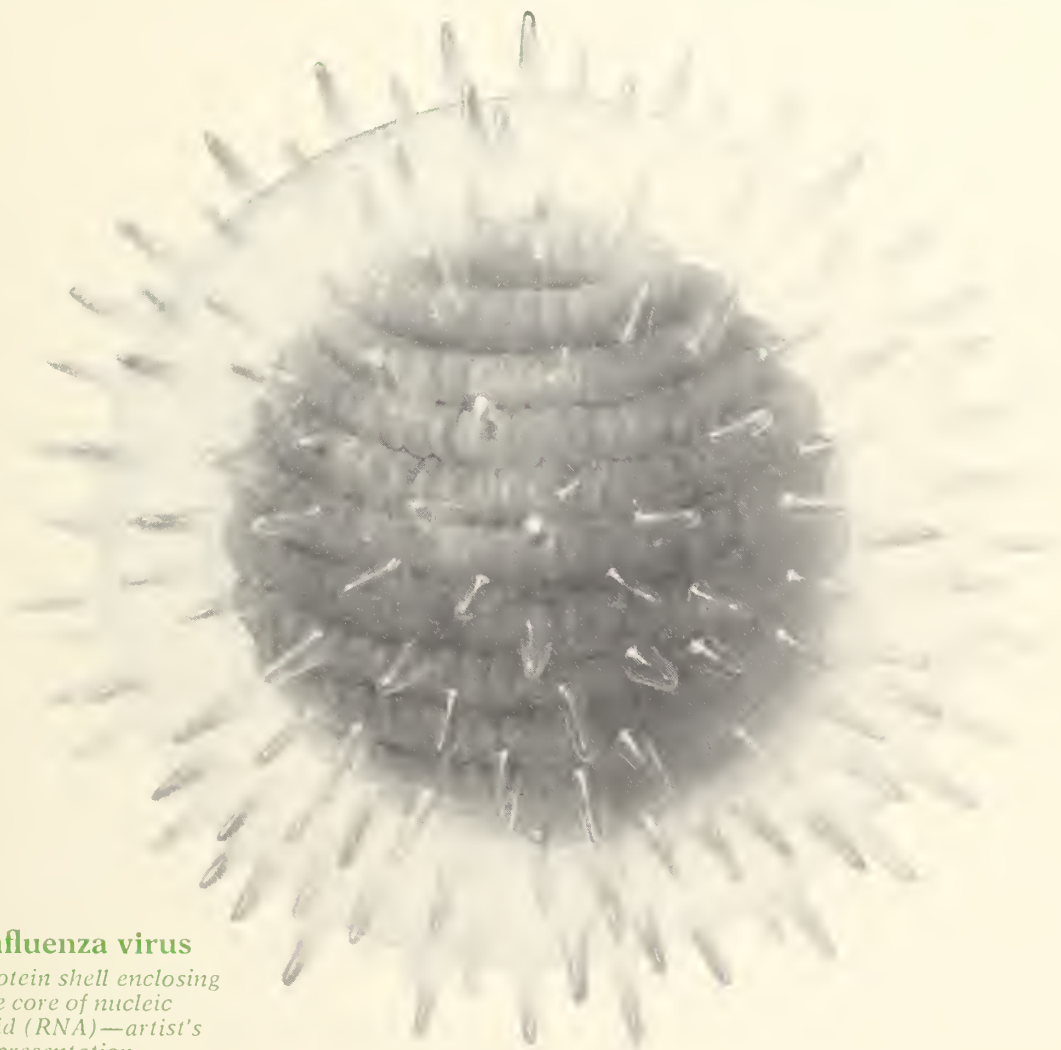
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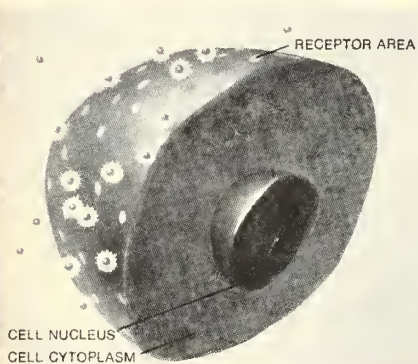
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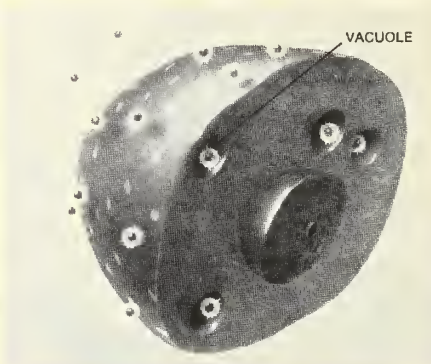
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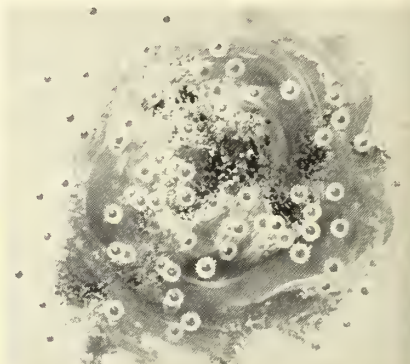
How the influenza virus invades and destroys the untreated cell



1 Viruses outside the cell attach themselves to specific cell receptor areas

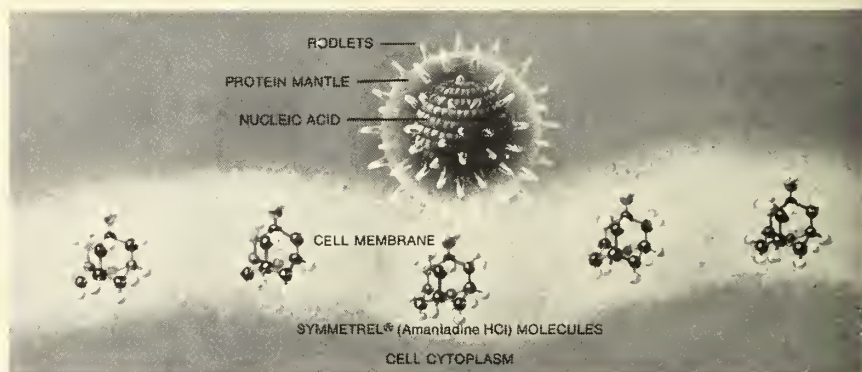
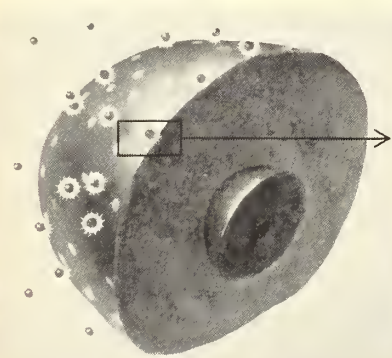


2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm



3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

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Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A₂ or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such

as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: Adults: Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: Capsules: Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.

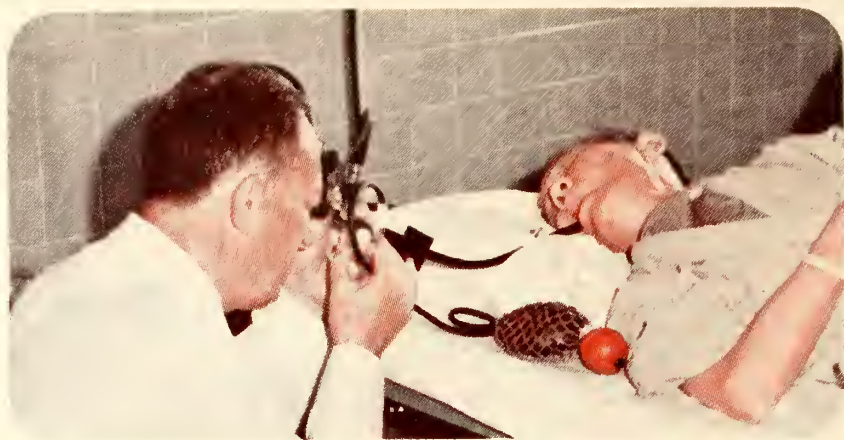
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.



Symmetrel®

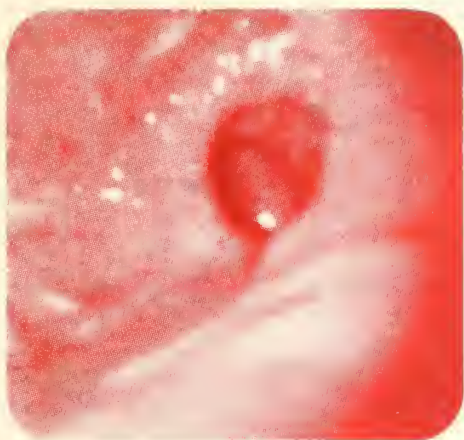
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A molecular barrier to virus penetration



NEW EVIDENCE:

Pro-Banthine[®] (propantheline bromide)
gives positive, selective benefits in
gastrointestinal disorders.



Intragastric photograph of pyloric region showing complete relaxation of pyloric sphincter with 6 mg. of Pro-Banthine intravenously.

AN IMPORTANT PROBLEM in managing gastrointestinal disorders has been the choice of an anticholinergic agent which will act positively and selectively on the gastrointestinal tract without extensive secondary effects.

Recent direct observations with the cinefibergastroscope and intragastric photography¹ visually confirm previous evidence that Pro-Banthine does, indeed, possess such selective activity.

Barowsky and his associates demonstrated that a minimal dose of 6 to 8 mg. of Pro-Banthine intravenously produced complete relaxation of gastric activity. Secondary effects were not significant.

By contrast, it required 0.8 mg. or double the usual dose of atropine intravenously to achieve similar gastric relaxation. Side effects of this dosage of the belladonna alkaloid were pronounced. Ventricular rates were as high as 150 per minute.

For positive, selective anticholinergic benefits Pro-Banthine is indicated in patients with peptic ulcer, gastritis, irritable colon and other forms of gastrointestinal hypermotility.

Dosage: The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type ampuls of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

Contraindications: In glaucoma or severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in the elderly male with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug.

Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

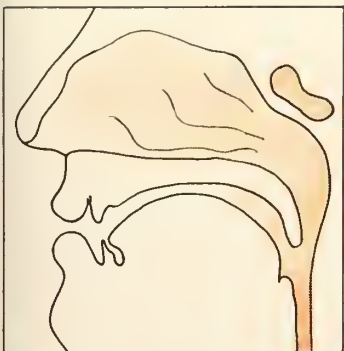
1. Barowsky, H.; Greene, L.; Bennett, R., and Buganza, G.: The Effect of Anticholinergic Drugs on Gastric Motility and Pyloric Function, Scientific Exhibit, Annual Convention of the American Medical Association, Chicago, Illinois, June 26-30, 1966.

When the battle with bacteria is in the upper respiratory tract

Routes of invasion through the oral and nasal passages to the nasopharyngeal mucosa: artist's depiction of sagittal section of head in perspective.



consider Gantanol (sulfamethoxazole)



To rapidly help the patient win against upper respiratory infections

When the respiratory tract has been invaded, an antibacterial that can assure effective yet generally uncomplicated therapy is your first line of defense...an agent such as Gantanol (sulfamethoxazole), the wide-spectrum antibacterial from Roche.

Gantanol (sulfamethoxazole) is effective against common susceptible upper respiratory pathogens, both gram-positive and gram-negative. Acting at foci of bacterial invasion, Gantanol (sulfamethoxazole) promptly helps control most infections, yet usually presents few problems to patients. Dosage is convenient and provides a measure of economy.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How supplied: Tablets, 0.5 Gm, bottles of 50.

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in the upper respiratory tract**

Gantanol[®]
(sulfamethoxazole)





"Yes, Doctor, the pain is gone."

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Each tablet contains: Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

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Successful Transuterine, Intraperitoneal Fetal Transfusion—Report of a Case

George Cassady, M. D.*

William Brakefield, M. D.**

Recent advances in management of the sensitized Rh negative pregnancy were summarized in a current issue of this journal.¹ The central importance of amniocentesis was presented and interpretation of zone I, II and III amniotic fluid was briefly discussed, with zone III amniocentesis being shown to predict life-threatening in-utero fetal disease. With sufficient maturity (34 to 35 weeks gestation or more) immediate delivery appears to offer the best opportunity for perinatal survival in these severely affected cases but at less than 34 weeks gestation, the hazards of immaturity potentiate the danger of fetal anemia and infant salvage rarely results. As a result, the use of transuterine, intraperitoneal transfusion of the fetus (so-called "intrauterine transfusion") is currently being used in a number of medical centers² in an effort to ameliorate the life threatening anemia and allow maximum gestational maturity before delivery.

Successful completion of this procedure was recently accomplished at the University

of Alabama Medical Center and the recording of this case constitutes the purpose of this report.

J. S. was a 26 year old, Para 2-0-1, Rh negative (cde/ce) white female. Her first pregnancy was uncomplicated, Rh antibody titers were negative, and the mature, type O, Rh positive (cDE/ce) infant displayed no neonatal jaundice. The most recent normal menstrual period began March 1, 1966 and negative albumin Rh (D) titers were recorded on April 27th and again on June 30th. On September 26, 1966 (at 30 weeks of gestation), the albumin Rh (D) titer was 1:32. At that time, transabdominal amniocentesis was performed which showed a zone III curve (fig. 1.) Amniotic fluid on the following day confirmed a zone III curve and on September 29th, at 30½ weeks gestation, a transuterine, intraperitoneal fetal transfusion was performed, using the technique of Liley.³ Four hours following injection of 10 ml of 50 per cent hypaque into the amniotic cavity, fetal swallowing resulted in radiographic localization of dye in the fetal intestines (fig. 2). Following skin and subcutaneous anesthesia with 1 per cent zylocaine, an 18 inch, 18 gauge needle with stylet was passed into the amniotic cavity, directed toward the radioopaque fetal intestines, and then introduced into the fetal peritoneal cavity. The first attempt to pass the needle from amniotic cavity into the fetus was unsuccessful, 1 ml. of hypaque remaining localized following in-

*Associate Professor, Director of Newborn Division; Department of Pediatrics; University of Alabama Medical Center.

**Clinical Instructor; Department of Obstetrics and Gynecology; University of Alabama Medical Center.

This work was supported by grant No. 55-7827 from the Robert E. Meyer Foundation, Birmingham, Alabama.

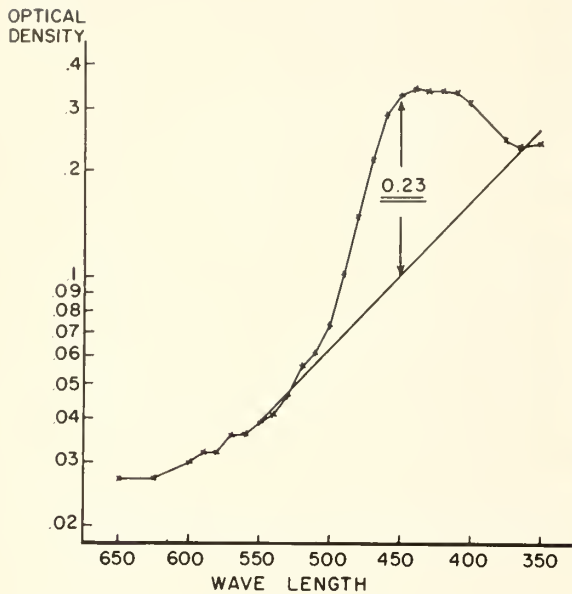


Figure 1. Amniotic fluid prior to first intrauterine transfusion—deflection from tangential straight line at 450 = 0.23 a zone III curve at 30 weeks gestation.

jection. The second attempt was successful, the dye clearly 'falling' across loops of bowel and delineating in clear relief the fetal intestines. Insertion of a polyethylene catheter through the needle was unsuccessful and therefore the fetal transfusion was carried out with one operator restraining the fetus by extrauterine pressure while the second operator transfused a total of 100 ml of fresh heparinized type O, Rh (D) negative packed cells (hematocrit 85 per cent) over a 40 minute period. Fetal tachycardia to 190/min. associated with maternal syncopal symptoms occurred mid-way in the procedure but these findings were relieved with elevation of the mother's legs.

Eleven days later, at 32 weeks of gestation (September 10th), a second "intrauterine transfusion" was performed. At that time, a total of 70 ml. of type O Rh negative heparinized fresh packed red cells (hct 94 per cent) was placed in the fetal peritoneal cavity over a 65 minute period. On that occasion, a polyethylene catheter was successfully threaded through the needle into the fetal peritoneal

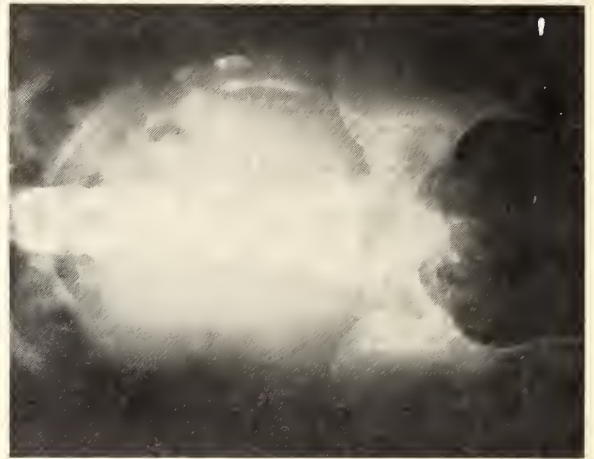


Figure 2. X-ray following "dye swallow" by fetus—arrow indicates radio-opaque material in fetal intestine. Better visualization was possible with direct fluoroscopy than is apparent in this film.

cavity allowing removal of the needle during the transfusion. Fetal tachycardia to 220/ occurred twice but was not persistent, an average fetal heart rate of 160/min. being maintained throughout most of the transfusion. No evidences of fetal distress were noted following the procedure and, after 48 hours of bed rest and observation, the patients were discharged.

Three weeks later, at 35 weeks gestation, elective cesarean section was performed with delivery of a 2260 gram, O-positive, Coombs positive female infant. Marked hepato-splenomegaly was noted in the delivery room but umbilical venous pressure was not elevated (<100 mm), and pallor and edema were absent. Umbilical cord venous hematocrit was 39 per cent, reticulocyte count was 18.5 per cent, total bilirubin 4.8 mgm per cent (3.7 mgm per cent indirect), and total protein was 4.4 g per cent. Direct staining of umbilical venous red cells⁴ showed 23 per cent adult (donor) cells. The rate of bilirubin rise was moderate but persistent (see fig. 3) and exchange transfusion was performed at 74 hours of age using 450 ml. of fresh heparinized type Rh (D) O, negative blood in 20 ml. aliquots over a 55 minute period. Pre-exchange indirect (unconjugated) bilirubin

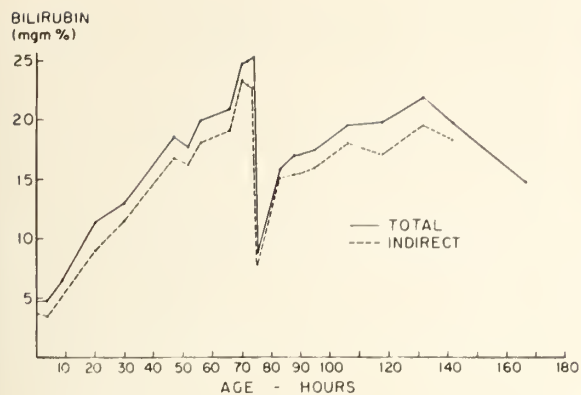


Figure 3. Graphic demonstration of serial serum bilirubins in the infant. The precipitous fall at 74 hours marks the performance of exchange transfusion.



Figure 4. Baby girl A. S. shortly after discharge from the High Risk Nursery.

was 22.7 mgm per cent with a hematocrit of 27 per cent; post exchange indirect bilirubin was 7.7 mgm per cent with a hematocrit of 37 per cent. The maximum subsequent indirect bilirubin was 19.5 mgm per cent and a second exchange was unnecessary.

A minimum weight of 1920 grams was achieved at six days of age. The infant was discharged at 18 days weighing 2100 grams, with a hematocrit of 37 per cent (fig. 4).

Certain points need to be added to this simple presentation, in order to provide proper perspective. Diagnostic amniocentesis appears to be a simple, accurate office procedure, essential in the proper management of the Rh (D) sensitized pregnancy. Use of this valuable tool should be expected to noticeably reduce perinatal mortality. In contrast, transuterine intraperitoneal fetal transfusion is a complicated and hazardous procedure. In a selected, individual patient, the results may be rewarding but the numbers of such patients are too few and the hazards of the procedure too great to notably affect the over-all perinatal mortality rate. In a recent symposium² on this experimental technique, a fetal mortality rate of 70 per cent and maternal morbidity rate of 2.4 was emphasized. The results, in a patient population (zone III amniotic fluid) where 100 per cent fetal mortality is to be expected, may be considered encouraging but a 30 per

cent salvage rate is still low, particularly in view of the increased hazards of infection and hemorrhage in the mother.²

Certain 'rules' in the use of this experimental procedure seem apparent:

(1) Both parents must understand *in detail* both the hazards and the hope the procedure carries with it.

(2) Stable women of low parity would seem to be better candidates than emotionally labile women or mothers with a heavy family responsibility.

(3) At best, the procedure is tedious, painful and frightening to patient and physician alike. *Optimal medical services must be available* before the procedure is ever considered. These must include well trained obstetrical and pediatric medical assistance available around the clock, adequate blood bank facilities, well trained nurses and adequately staffed nursing units, facilities for immediate surgery, exchange transfusion and/or resuscitation as needed, adequate x-ray facility for cine-fluoroscopy with image amplification providing the *minimum* currently available radiation exposure, and radiologic technical and professional consultation.

(4) Perhaps most importantly, in a day when symptoms are treated as diseases and the management of a disease is considered

impossible without a drug, pill, or procedure, the responsible physician employing this technique must realize that he is truly 'practicing' medicine—the experimental nature of the procedure insists that doctor and patient equally understand this fact. Under no circumstances must this procedure be considered in any other light than as a potentially dangerous, yet promising experimental technique.

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What Price Sex Prediction

News of 100 per cent accuracy in predicting a baby's sex during its mother's pregnancy carries a note of caution. To make the test, some of the fluid that surrounds the fetus is withdrawn to obtain cells for microscopic examination. Sometimes more than one sample of fluid is drawn before the test can be made. Withdrawal of the fluid changes the environment of the developing fetus and is not without danger to both mother and child. Although not recommended merely as a means to satisfy the curiosity of parents concerning the sex of the unborn baby, the test may be helpful for the geneticist or obstetrician in diagnosis of sex-linked hereditary diseases and thus may become an important tool in preventive eugenics. (A. P. Amarose, Ph. D., and others: "Prediction of fetal sex from cytologic examination of amniotic fluid," in *The New England Journal of Medicine*, 29 September 1966).

New York Giants Team Physician

If a player on the New York Giants football team sprains his ankle on the field, he can, in addition to the pain, suffer a \$50 fine.*

The fine would be added to the injury if it were found he hadn't followed the iron-bound rule of the team physician, Dr. Francis J. Sweeney, that every player must always have his ankles, and sometimes his knees, professionally and carefully taped before he enters the gridiron.

This is only one of the innovations in the care and training of football players that Dr. Sweeney has instituted in more than three decades of tending athletes. Obviously, Dr. Sweeney says, athletic medicine isn't what it used to be, and neither is the game. They're both better.

In the old days, which began for Dr. Sweeney in 1925 after he graduated from Georgetown University School of Medicine and began unofficially looking after Lou Little's Georgetown players, "if a player was knocked out on the field, the cry would go up: 'Is there a doctor in the house?' And more often than not, the person who answered the call was someone who just wanted to get down on the field and didn't know any more about medicine than a taxi driver."

"The players used to call me 'Old Stitch'," says Dr. Sweeney with the pride of a true artist, "because of the number of cuts I've sewed up in my 31 years with the Giants. But you don't see the cuts and lacerations today that you used to. You can thank modern equipment and training for that."

*In 1966, the fine was \$250.—Ed.

DIPLOMAT: A man who won't tell you you have a hole in your head—he'll say you have an open mind.

Report on First Congress on Socio-Economics

By L. P. Patterson, Executive Director

Medical Association of the State of Alabama

The responsibility of the nation's physicians for effective organization, delivery and financing of health care services was the theme of the First National Congress on the Socio-Economics of Health Care held in Chicago January 22-23, 1967. The Congress was sponsored by the AMA Council on Medical Service and the Division of Socio-Economic Activities.

With attendance far exceeding expectations, delegates included authorities from medicine, health care administration, social science, education, community planning, and other disciplines.

Principal speakers included Charles L. Hudson, M. D., President of the American Medical Association; C. Wesley Eisele, M. D., Director of the Postgraduate Medical Education at the University of Colorado School of Medicine; Dwight L. Wilbur, M. D., Clinical Professor of Medicine at Stanford University School of Medicine; and Brig. Gen. Robert A. Patterson, M. C., Director of Plans and Hospitalization, Office of the Surgeon General, U. S. Air Force.

At the opening session Dr. Hudson advocated a program of "critical self-examination as a demonstration of professional competence" as a desired objective of physicians in America. He warned that members of the medical profession "must demonstrate their competence to carry out all of the technical, professional, and administrative responsibilities which naturally devolve upon them as individual physicians and as the medical profession of this country."

Dr. Hudson outlined a three-point program of self-explanation as a demonstration of professional competence. They were:

(1) Evaluation of the quality of service rendered by physicians and others in the

health services field, whether in the hospitals, office, or patient's home;

(2) Solution to the increased demand for medical service because of population growth and increased longevity;

(3) An evaluation of the entire field of medicine to determine the services which will be needed in the future and the skills required to meet those needs.

Theodore D. Woolsey, Deputy Director for the National Center for Health Statistics, Public Health Service, opened the orientation session with a discussion of the importance of statistics in any evaluation of health care programs.

The second speaker was James L. Dennis, M. D., Dean of the Oklahoma School of Medicine, who described the "Oklahoma Plan" of meeting health needs.

"Our approach is based on the philosophy that Oklahoma's growing health needs can be met only by the combined efforts of our citizens, our practicing professions, our state and voluntary health agencies, and the State's only University Medical Center. Such a mutual effort is available only if the Medical Center will relate its efforts to the State Community's needs and provide the sublimated leadership necessary to acquire professional and public support.

"In keeping with the philosophies expressed, we plunged into the problems of developing the Medical Center into a comprehensive, 'Oklahoma Health Center.' From the beginning there was the obvious necessity to mobilize, rather than further divide, the potential strengths of our physicians, faculty, health departments, community hospitals, voluntary agencies, government agencies, and our most influential citizenry. We en-

(Continued on Page 1100)

**How long will it take him
to recover from the flu
if he just doesn't care?**



**Does he really care?
Is he alert, encouraged,
positive and optimistic
about getting out of bed
and back to work soon?**

**Or is he giving in to
the depressing impact
of confinement?**

**When functional fatigue
complicates convalescence,
Alertonic can help...**

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that so often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

*Adequate dosage is important: Prescribe Alertonic—
one tablespoonful t.i.d., 30 minutes before
meals...tastes best chilled.*

*And for your patient's sake, prescribe Alertonic
in the convenient, economical one-pint bottle.*

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Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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(Continued from Page 1097)

vision the Oklahoma Health Center as one which will accept the medical social responsibility of relating education, training, research, and service programs to state-wide needs. A center in which the University Medical Center will provide a core institution, but will be only one of many separately governed public and private institutions, hence, meaningful to all segments of our society.

"To co-ordinate the Oklahoma Health Center and to insure broad goals and a continuing 'public conscience' we proposed that an 'umbrella' nonprofit corporation, comprised of 'blue-ribbon' citizens representing every section of the State be formed to provide a co-ordinating body for the greater Oklahoma Health Center. This group has been incorporated as 'The Oklahoma Health Sciences Foundation, Inc.'

"The goals of the Foundation are many but can succinctly be described as follows: to attract, encourage and assist private and public institutions and agencies related to the public health, health science education, biomedical research and exemplary patient care to locate in a functional relationship to the University of Oklahoma Medical Center, according to a Master Plan, and in so doing to encourage a 'unity of diversity' in efforts to meet the health science manpower needs of the people of Oklahoma."

"The Nation's Health Manpower" was the subject of Dr. Wilbur's discussion. He pointed out that almost 300,000 physicians, over 1.5 million allied health personnel, almost 8,000 hospitals with 1.75 million beds, several thousand nursing homes, rehabilitation centers and day-care facilities, are directly involved in private health care to the American people. He added that the adequacy of physician manpower has been under serious study since 1901.

"In our concern with shortages of personnel, we must not neglect quality of preparation and training in meeting the challenge of numbers. Especially in health care, quantity

is no substitute for quality. Too much is at stake. Ineptitude on the part of a sincere but poorly trained laboratory worker may prove to be a fatal error. We need not only more health workers, but more importantly, we need good ones. They must be trained by well-prepared teachers and within the health complex of which they will become a part. The interrelationships and interdependence of one skill on the next, all pointed to the best possible patient care, must be an integral part of the training process," he said.

Dr. Wilbur added: "We do need more physicians and the profession together with the public should and will increase its efforts to provide more training opportunities. The professions need to critically examine themselves in the light of such reports as those of the Citizens Commission on Graduate Medical Education, the ad hoc Committee on Education for Family Practice, and the National Commission on Community Health Services, as to the training and the role of the family physician and the medical specialist. Equally important, the physician needs to re-examine his activities and determine those which must be done by him and those which could best be done by others while maintaining the desired level of patient care. From such studies will emerge the beginning answers to our medical manpower problem. With the needs for existing and new types of supportive personnel described, and with community planning, training programs can be developed. But in our society, the job must be meaningful, offer reasonable financial returns, and the opportunity for advancement if it is to attract those individuals who will serve the health enterprise to the height of their capacity. This can be done and it is our responsibility to get on with the job now."

Dr. Eisele cited the many changes in health care and asserted that many of the changes have been brought about by the medical profession itself with the hospital filling the voids in medical care which individual physicians are unable or unwilling to fill.

He warned that a gauze curtain stands be-

tween the medical staff and hospital administrators but that it is "of disposable variety."

"The hospital is a single organization. This is the first basic principle to be emphasized. The primary purpose of all concerned is the same—to provide high quality patient care," he said. "When this principle is firmly established, the hospital is no longer merely the doctor's workshop, and it is recognized that the physician's responsibility extends beyond the care of his own patients. The one-to-one physician-patient relationship can remain inviolate only so long as the one doctor provides good care for the one patient. The entire medical staff, the board of trustees, and the administration share moral and legal responsibilities to take whatever steps are necessary to insist on high standards of care."

The training of specialized ancillary personnel was discussed by Fred J. Spencer, a native of Great Britain, who holds the Bachelor of Medicine and Master of Public Health degrees and is Professor and Chairman of the Department of Preventive Medicine to the Medical College of Virginia. He made these points:

1. There is an increasing demand for medical services from the general public, partly occasioned by the improvement in education. The many contributions pertaining to health in the press, particularly the women's magazines, have contributed to the sophistication of the public in health matters.

2. The present number of physicians in the United States is unable to deal with the increased demand for medical services. There is therefore an interest in the more economical use of present health personnel and also in the training of different types of health personnel.

3. The precedent for the "physician assistant" is established in Russia with the *feldsher* and in many of the colonies or ex-colonies of the colonial powers of Great Britain, France, and other European countries. In Fiji, the assistant medical officer is comparable to a general practitioner in any part of the world. The other "physician as-

sistants" vary from semi-illiterates with three years training in New Guinea to the *behdar* in Iran who at present is receiving further education and being graduated with medical degree.

4. There are some principles of the training and use of the "physician assistants" as exemplified in the countries which now employ them. These include:

Supervision

This is absolutely necessary for the proper use of "physician assistants." Methods of doing this in the developing countries have been directly by legislation and indirectly by limiting the drugs and equipment available to the "physician assistant."

Training

There should be a considerable gap between the education of the physician and the training of the "physician assistant." Without this, the "physician assistant" becomes dissatisfied with his position and attempts to work as a degree physician in all but name. This produces a most unsatisfactory condition where physicians and "physician assistants" conflict in patient care.

Satisfaction With Position

The "physician assistant" must have some satisfaction in the work that he is doing or he either reverts to more primitive methods of medical practice or attempts to assume the responsibilities of a physician. It is desirable to have a professional organization of which the "physician assistant" may be a member.

Specialism

In some countries, the "physician assistant" is acting in the capacity of a specialist in certain aspects of medical practice. This is desirable with the provision that he is completely supervised by a specialist physician.

Medical Services

It is evident that the "physician assistant" has a place in medical care in developing

(Continued on Page 1104)

The Mediatrix Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.

"A steroid-nutritional compound (Mediatrix) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging ... This therapy resulted in improvement of 75 per cent of the patients ..."

McNeill, A. J.: Clin. Med. 8:518 (Mar.) 1961.

"Mediatrix (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics 12:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

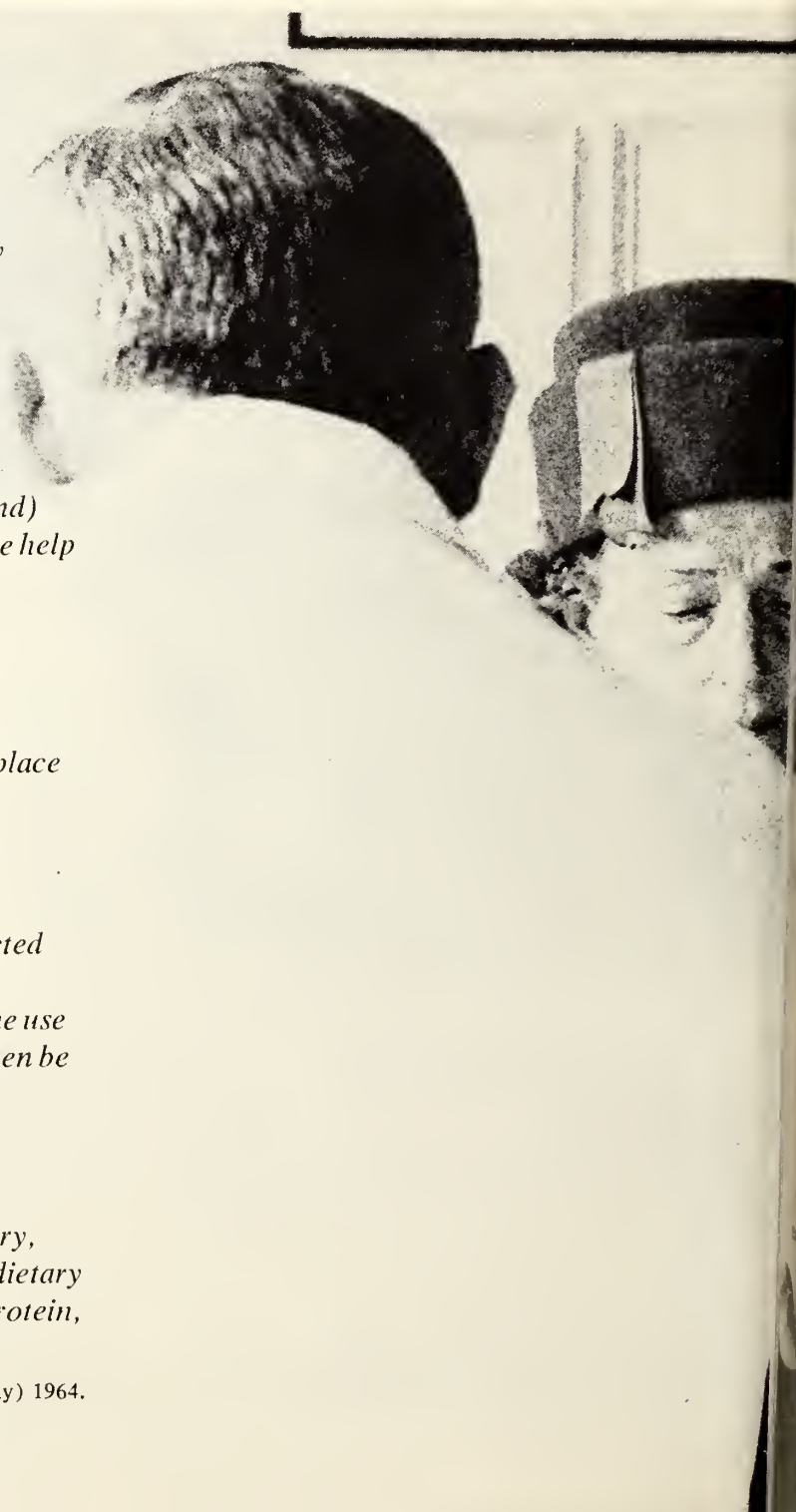
Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied ... The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. 12:489 (May) 1964.



Mediatric®

Designed for the “metabolically spent”

Nutritional reinforcement for those who can't
— or won't — eat properly...balanced amounts of
estrogen and androgen to counteract declining
gonadal hormone secretion and its sequelae of
premature degenerative changes...mild
antidepressant for a gentle “mood” uplift...

The estrogen component in MEDIATRIC is **PREMARIN®** (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation*. It contributes a gentle “mood” uplift through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 — MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 — MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 — MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.



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steroid-nutritional compound



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(Continued from Page 1101)

countries which could be adapted to the United States. However, the differences in the cultural, social, and economic patterns of the countries must receive consideration in applying the principles of the use of the "physician assistant" in the United States.

5. Present Programs in the USA

Duke University has trained, or is training, clinical physician assistants who act under supervision in the hospital service. The University of Colorado is training public health nurse—pediatric—practitioners to work with underprivileged families in Colorado.

6. Curative Versus Preventive Medicine

The use of "physician assistants" at present in the United States is mainly in the realm of curative medicine. It would seem that there is more place for this type of individual in preventive medicine, particularly in patient counseling where the physician does not have time to explain his management to the patient, as the public health nurse now does with patients in the health services.

7. In addition to this the reorganization of medical services should be accomplished. The use of "physician assistants" should be only one part of the revision of health services.

In closing the conference, Morton D. Miller, Vice President of the Equitable Life Assurance Society of the U. S., observed that there is emerging "a renewed determination on the part of private health insurers to build on the already impressive record of achievement in extending health care protection to the American people."

"By the close of 1966," he added, "an estimated 159 million persons in this country—82 per cent of the United States civilian population—had some form of voluntary health insurance. Of those with hospital expense insurance, 94 per cent were also insured for surgical expenses. In addition, some 72 per cent were covered for regular medical ex-

penses, and 35 per cent had major medical protection.

"Numbers alone are not the whole story, of course. How well were these millions of people protected against unpredictable health care costs? It is estimated that out of every \$5 spent by these insured persons for hospital care, a minimum of \$4 is paid by their hospital insurance. For physicians' services, the proration paid by insurance is about \$1 of every \$2. This breaks down further into about \$4 of every \$5 with respect to surgery, and \$1 out of every \$4 for the cost of physicians' non-surgical services."

Postgraduate Course On Hip Disease And Trauma

The first comprehensive postgraduate course on current concepts on the management of hip disease and trauma under sponsorship of the Committee on Injuries of the American Academy of Orthopaedic Surgeons will be held April 20-21-22, 1967, at the Americana Hotel, Bal Harbour, Miami Beach, Florida.

Director of the course for orthopaedic surgeons, general surgeons, general physicians, residents, and interns is Dr. Wallace E. Miller, University of Miami Professor of Orthopaedic Surgery and Chief of Orthopaedic Surgery, Jackson Memorial Hospital, Miami. The faculty is composed of 15 members of the American Academy of Orthopaedic Surgeons and 3 guests, all being well known for their topics to be discussed. The success of a seminar dealing in depth with a single region of the body will determine other seminars in the future of a similar type.

For application forms and further information, write to Dr. Miller, Jackson Memorial Hospital, 1700 N. W. 10th Ave., Miami, Florida, 33136, or to the American Academy of Orthopaedic Surgeons, 29 East Madison St., Chicago, Illinois, 60602.

TRANSACTIONS

of

THE CALLED MEETING

of the

MEDICAL ASSOCIATION

of the

STATE OF ALABAMA

NOVEMBER 6, 1966

The College of Counsellors and House of Delegates of the Medical Association of the State of Alabama, in a notice transmitted on September 27, 1966, were called to meet in special session by the President, J. O. Finney, M. D., at the Jefferson Davis Hotel in Montgomery, Alabama, on Sunday, November 6, 1966, at 11:00 A. M. to consider the following matters deemed of urgent and paramount importance to this Association:

A. Report on negotiation between the Board of Censors and Blue Cross-Blue Shield of Alabama, Inc.;

B. Title XIX of Public Law 89-97—its implementation by the State of Alabama in such manner as will prevent interference with the practice of medicine;

C. The financial condition of the Medical Association of the State of Alabama;

D. Any and all other matters which the College of Counsellors and House of Delegates consider of an emergency nature.

The meeting was called to order at 11:10 A. M. by the President, with 174 Counsellors and Delegates, 50 members and visitors in attendance. The invocation was given by James G. Donald, M. D., Immediate Past President.

AGREEMENT WITH BLUE CROSS-BLUE SHIELD OF ALABAMA, INC.:

The first matter of business on the agenda was a report on negotiations with Blue Cross-

Blue Shield of Alabama, Inc., by Paul W. Burleson, M. D., Chairman of the Ad Hoc Committee of the Board of Censors of the Medical Association of the State of Alabama. Dr. Burleson reviewed the background of the dispute between this Association and Blue Cross-Blue Shield relative to the responsibility of the six physician members of the Blue Cross-Blue Shield Board of Directors as they pertain to Blue Shield contracts. At the conclusion of the review, Dr. Burleson presented an agreement which had been reached by the Ad Hoc Committee and representatives of Blue Cross-Blue Shield as follows (as amended):

1. *There will be established within the Board of Directors of the Corporation, two Executive Committees; one dealing with Blue Shield matters and one dealing with Blue Cross matters. The Blue Shield Committee will be composed of the six physician members of the Board of Directors along with three public members of the Board of Directors. Likewise, the Blue Cross Committee will be composed of the six hospital members of the Board of Directors along with the three remaining public members of said Board. These two Committees shall be respectively designated as, "Blue Shield Executive Committee" of the Board of Directors and "Blue Cross Executive Committee" of the Board of Directors. The Blue Shield Executive Committee shall*

have sole authority and responsibility in all matters dealing with Blue Shield activities of the Corporation during the interval of time between full Board of Directors meetings, and likewise, the Blue Cross Executive Committee shall have corresponding authority and responsibility in dealing with Blue Cross activities of the Corporation during the interval of time between full Board of Directors meetings. These Committees shall meet separately on a monthly basis or at such other intervals as they may determine individually. It shall be their responsibility to conduct the affairs of the Corporation in their specific sphere of authority and responsibility during such intervals. The full Board of Directors shall meet no less often than quarterly for the purpose of receiving, reviewing and passing upon the reports of the activities of the two Executive Committees and also to conduct those affairs of the Corporation that are not assignable to the separate actions of the two Executive Committees.

2. The Corporation shall keep separate accounts and render to the two Executive Committees and to the public separate annual accounting subject to examination and verification by independent public accountants, with respect to the receipt of premiums and the disbursement of allowed claims under (a) its hospital service contract (generally termed "Blue Cross" contracts) and (b) its medical and/or surgical contracts (generally termed "Blue Shield" contracts or riders).

The Corporation shall establish the principle and adhere strictly thereto that premium rates for hospital care and those for physician care shall each be self-supporting. The Corporation's recently installed computer accounting system will disclose any inadequacy of rates from month to month so that no large deficit will be built up in either branch of the Corporation's business before discovery. As soon as the accounting records disclose that there is a failure of either type of business to be self-sustaining, the adjust-

ment of rates to remedy this shall be promptly sought and put into effect.

If co-mingling of funds becomes necessary because of a loss position of one activity in relation to the other, such credit will be given back to the activity not in a loss position as soon as the rate adjustments are applied and a sufficient surplus is created to permit such crediting.

That it be recognized that because these programs are the responsibility of a single Corporation, its total assets are as a matter of law and of good faith committed to all of its liabilities. It would be impossible for one branch of the Corporation to be insolvent or bankrupt while the other carried on business as usual.

3. In respect to the terms, conditions and administration of any plan, agreement or contract between the Corporation and the Federal Government, under which the Corporation shall serve as intermediary or carrier or as agent for the Government under any provision of the Medicare Act or other federal medical programs pertaining to payment of fees under Medical and Surgical services, the same authority and responsibility as granted under point 1 of this agreement shall have similar application as it relates to the Blue Shield Executive Committee. A similar application of point 1 shall be inherent in those activities dealing with Government in the interest of the general public. It is also recommended that no unilateral action in respect to press releases, either before or after final approval of the principles outlined in this report, shall be taken by either the Board of Censors of the Medical Association of the State of Alabama or the Board of Directors of Blue Cross-Blue Shield of Alabama.

It was the very sincere belief of all the members that the settlement outlined above was accomplished with an air of mutual faith and trust and carries with it the unqualified recommendation of all for approval between the two principals concerned, namely the Medical Association of

the State of Alabama and Blue Cross-Blue Shield of Alabama.

It was recognized by all parties, however, that the agreement outlined above is in the nature of a trial agreement and that it can be determined only through experience and operation under the agreement whether it will be mutually satisfactory to the parties. Accordingly, it was agreed that the terms of the agreement shall be subject to review at the expiration of one year from its implementation and that in the event operation under the agreement is not then mutually satisfactory, the subject matter of the agreement will be renegotiated upon request by either party. It was agreed further that in the event upon such review the parties conclude that operation under this agreement is mutually satisfactory, the By-laws of the Corporation will be promptly amended so as to provide for the subject matter of the agreement.

ADDENDUM

Reference is made to the last sentence of the first paragraph of page 2: "The full Board of Directors shall meet no less often than quarterly for the purpose of receiving, reviewing and passing upon the reports of the activities of the two Executive Committees and also to conduct those affairs of the Corporation that are not assignable to the separate activities of the two Executive Committees." In defining the Board of Directors as the responsible body for approving the actions of the two Executive Committees rather than the Board of Trustees, it seems to be apparent that this is a natural line of responsibility more suitable to this activity rather than to make the Board of Trustees responsible for conducting the business affairs of the Corporation.

First of all, the Board of Trustees only meets annually and is composed of a membership that is not closely aligned with the daily operations of the Corporation and, as a result, not as knowledgeable a body as

the Board of Directors in supervising the Corporate activities.

Second, it is a body that is not structured to conduct the business affairs of the Corporation. This power has been vested in the Board of Directors.

Third, the Blue Shield Executive Committee, in pursuing its activities, would have a great deal more strength in dealing with relations in areas of hospital matters for the Blue Cross Executive Committee.

The above arrangement establishes an identity specifically assignable to Blue Shield affairs and a similar identity to matters dealing with Blue Cross affairs. Further, by the granting of this autonomy to these Committees, we are assuring physician responsibility and activities in the area of Blue Shield matters and a like responsibility for activities on the part of the hospital members in the area of Blue Cross matters.

As a further point of consideration, future appointment of physicians to the Board of Trustees and ultimately to the Board of Directors of Blue Cross-Blue Shield of Alabama, should have at least two of these individuals who also serve as members of the Board of Censors of the Medical Association of the State of Alabama. This would create a strong line of communication between these two principal Boards and would insure that the feeling and attitudes of the Board of Censors would be adequately reflected in the activities of the Blue Shield Executive Committee and vice versa.

Upon final approval of this agreement by the Board of Censors of the Medical Association of the State of Alabama, the Board of Trustees of the Alabama Hospital Association, and the Board of Directors of Blue Cross-Blue Shield of Alabama, it was recommended that a joint press release be issued taking full advantage of the terms of the settlement as being ultimately the Board of Directors of which it forms 50 per cent of the membership as opposed to

its representation on the Board of Trustees of which it would control only nine of some 150 odd votes.

Fourth, the complications and size of the present Corporation activities are such that a more frequent review by a knowledgeable group of Directors is deemed essential. It would certainly appear that the membership of the two Executive Committees, recognizing their very great responsibility, would themselves insist upon this review authority being vested in the Board of Directors rather than to the Board of Trustees.

As further supporting evidence to point 2 of this report dealing with the accounting procedures of the Corporation, it is the sincere intent of the Corporation to make any adjustment in rates required to retain each activity in a self-sustaining position well within a period of six months from the time that either activity might reach a loss position. The Corporation would adhere to the principle that rate adjustments would be instituted prior to the point where either of the two activities would reach a loss position and, as a result of this principle, the need of co-mingling of funds should be a rare occurrence.

In establishing a mechanism for allocating operational expenses equitable to both activities, it is the intent of the Corporation to develop a proration formula for purposes of making this allocation. The formula will be subject to examination and verification by public accountants in the same manner in which the separate accounts are subject to their scrutiny.

It is also the intent of the Corporation that premium income from the two activities will not be used to defray either the claim expenses or the operating expenses of the other unless the circumstances develop in which the co-mingling of funds is necessary to offset any losses, and then such co-mingling will be subject to the terms outlined in the third paragraph under point 2 of the report.

In order to insure that all facilities of the Corporation will be available to both Committees, the Staff of the Corporation will be available at all times to perform whatever functions they may be assigned by either Committee so that the Committees themselves may discharge their responsibility as efficiently as possible. In addition, there will be designated for each Committee a person who will be known as the "secretary" and further, a member of the Executive Staff will be available to attend all meetings of both Committees.

The above is some rationale behind two of the points contained in the report, and it is a sincere attempt to explain the reasoning behind the actions suggested. It is the hope that it will further clarify the interpretations applicable to the points being discussed.

Mr. W. E. Miller, Jr., Executive Vice President of Blue Cross-Blue Shield of Alabama, was invited to discuss the Corporation's viewpoint on the agreement.

Following discussion from the floor, the President called for a motion to ratify the agreement. The motion was made by W. A. Daniel, Jr., M. D., seconded by B. M. Carraway, M. D., and unanimously passed.

Following this session the College of Counsellors and House of Delegates recessed for lunch where they heard an address by Henry I. Fineberg, M. D., Executive Vice President, Medical Society of the State of New York, on the subject: "The New York Experience with Title XIX."

TITLE XIX STATEMENT OF POSITION:

The second session of the called meeting convened at 2:30 P. M. to hear a report by J. Garber Galbraith, M. D., Chairman of the Committee on Aging and the Indigent and a member of the Advisory Committee to the State Department of Pensions and Security on Title XIX. Dr. Galbraith outlined the numerous problems which will confront Organized Medicine in Alabama upon implementation of Title XIX by this State and

presented a proposed policy statement designed to safeguard the practice of medicine from bureaucratic encroachment.

The statement enunciated 15 principles designed to constitute the official policy of this Association. These principles follow:

STATEMENT OF POSITION

PRINCIPLE 1—Inasmuch as Title XIX is designed expressly to render comprehensive health care to the aged, the blind, the disabled, the indigent, and the medically indigent of this state, the responsibility for administrative supervision of this program shall be vested in the Alabama Department of Public Health.

PRINCIPLE 2—That responsibility for determination of eligibility shall be vested in the Alabama Department of Pensions and Security.

PRINCIPLE 3—That the Department of Public Health shall be authorized to contract with other subdivisions of state government to continue those programs encompassed within the provisions of Title XIX which they are now administering, viz:

- a. The Department of Pensions and Security shall continue to direct programs of aid to the blind, aid to families with dependent children, and aid to the totally and permanently disabled in all respects except those pertaining to medical care;*
- b. The Department of Education shall direct all programs relating to crippled children and rehabilitation in all respects except medical care;*
- c. The Department of Mental Health shall formulate and direct all programs dealing with the mentally ill and retarded whether inpatient or outpatient except in those areas concerned with medical care.*

PRINCIPLE 4—That no recipient shall be paid from Title XIX funds for physician services except under programs approved

and supervised by the Department of Public Health.

PRINCIPLE 5—That any legislation designed to implement the Title XIX program in Alabama shall include provisions that:

- a. Patients shall have free choice of physician or institution;*
- b. There shall be no interference in the practice of medicine by any official of the state or federal government;*
- c. There shall be no limitation on drugs, appliances or services prescribed by a physician unless dictated by financial considerations.*
- d. There shall be no requirement for prior authorization to extend medical services or to admit a patient to a hospital or other institution.*

PRINCIPLE 6—That the Department of Public Health shall be responsible for establishing and maintaining standards for private or public institutions in which recipients of medical assistance under Title XIX may receive care or services.

PRINCIPLE 7—That adequate funds shall be appropriated to the Department of Public Health, to the Department of Pensions and Security, to the Department of Education, and to the Department of Mental Health, for efficient administration of their duties.

PRINCIPLE 8—That the county or multi-county departments of health shall be the local administering agency for supervision of all phases of medical care under the Title XIX program.

PRINCIPLE 9—That the law shall require designation of a fiscal intermediary which shall be responsible for making payments to recipients and providers of services.

PRINCIPLE 10—That the law shall specify the payment of usual and customary fees for physician services or ancillary health care as the basis for any fee schedule imposed for medical care and that pay-

ments for laboratory, hospital, extended care, or other institutional services, shall be determined with the consent of the providers of those services.

PRINCIPLE 11—That there shall be created a statutory committee composed of representatives of every provider of services, which committee shall have a determining voice in the formulation of rules and regulations governing providers of services.

PRINCIPLE 12—That suitable legislation shall be drafted and presented to each subdivision of the state government or association representing providers of service at a convention to be called no later than February 15, 1967, and this Association strongly urges that no subdivision of the state government or any association representing providers of services take unilateral action to propose enactment of Title XIX legislation without consultation with all other providers of services.

PRINCIPLE 13—That each provider of services shall assume responsibility to obtain adequate financing of the Title XIX program.

PRINCIPLE 14—It is recommended that county governing bodies shall be given an opportunity to transfer that portion of their funds annually appropriated for care of charity patients into a central fund to be used for matching purposes.

PRINCIPLE 15—That nothing in the state law implementing Title XIX shall be construed as depriving the physician of his right to bill the patient directly or accepting assignments through the fiscal intermediary.

Following presentation of the Policy Statement, the President called for a motion on its adoption. The motion was made by Dr. Galbraith, seconded by S. Buford Word, M. D., after which the Counsellors and Delegates were invited to discuss the matter. After discussion the President called for the question, and the statement was unanimously adopted.

FINANCIAL STATUS OF THE ASSOCIATION:

The third matter on the agenda of the Called Meeting—related to the financial position of the Association. Among the speakers on this subject were: William L. Smith, M. D., Secretary-Treasurer; Carl A. Grote, Jr., M. D., Chairman of the Committee on Public Relations and Economics; E. L. McCafferty, Jr., M. D., Chairman of the Committee on Legislation; Robert Parker, M. D., Chairman of the Board of Censors; and Luther L. Hill, M. D., member of the Board of Censors.

The Secretary-Treasurer reported that increasing costs of operating the Central Office made it urgently necessary that an increase in dues of \$25 per annum be effectuated at this session, to become effective January 1, 1967. He presented a proposed budget for the calendar year 1967 which detailed income and expenditures, as follows:

BUDGET

Calendar Year 1967

ESTIMATED INCOME

State Dues	\$147,000.00
Annual Session	10,000.00
Interest	2,500.00
Rent—Journal	2,400.00
Telephone & Supplies—Journal	2,000.00
Rent—A. A. G. P.	720.00
Telephone—ALAPAC	900.00
Sale of Rosters	1,500.00
AMA Dues Collection Service	800.00
Addressing Service	250.00

TOTAL ESTIMATED

INCOME\$168,070.00

ESTIMATED EXPENDITURES

Reserves—Cash Contingencies	\$ 8,000.00
Reserves—Building Depreciation	6,000.00
Reserves—Equipment	
Depreciation	2,500.00

Salaries:

Full time personnel \$53,120.00

ASSOCIATION FORUM

Part-time personnel	1,500.00	
Light maintenance-messenger	1,560.00	56,180.00

Payroll Taxes & Employees		
Pension Plan	5,900.00	
Insurance	1,800.00	
Legislative—Attorney	5,000.00	
Annual Session	11,100.00	

Fixtures:		
IBM "Selectric" Typewriter	625.00	
Photo-Direct Camera Processor	6,000.00	
Office Furniture & equipment	1,200.00	7,825.00
Postage		4,000.00
Travel:		
Officers	5,000.00	
AMA Delegates	3,000.00	
Committees	3,000.00	
Staff	2,500.00	13,500.00

Stationery, Printing and Supplies		10,755.00
Telephone & Telegraph:		
Local and Interstate Service	1,680.00	
Wide Area Telephone Service, Intrastate	6,600.00	8,280.00

Maintenance, repairs, supplies (Building and Equipment)	3,000.00	
Dues and Contributions	11,000.00	
Automotive Upkeep	1,200.00	
Utilities	1,700.00	
Janitorial Service	1,560.00	
Woman's Auxiliary	500.00	
Reproducing Machine—Xerox	1,200.00	
Accounting Service	1,300.00	
Awards	250.00	

Photography	200.00
Library	300.00
Taxes and Licenses	1,000.00
Journal deficit	3,770.00
Miscellaneous	250.00

TOTAL ESTIMATED EXPENDITURES \$168,070.00

JOURNAL BUDGET

Calendar Year 1967

ESTIMATED INCOME

Advertising	\$30,000.00
Membership subscriptions (\$5.00 allocated from dues)	10,500.00
Nonmember Subscriptions and Sales	350.00
Reprints	400.00

TOTAL ESTIMATED INCOME \$41,250.00 \$41,250.00

ESTIMATED EXPENDITURES

Salaries	\$16,700.00
Rent (800 sq. ft. at \$3)	2,400.00
Printing	22,000.00
Travel	800.00
Postage	720.00
Telephone	800.00
Stationery and Supplies	1,200.00
Photography	400.00

TOTAL ESTIMATED EXPENDITURES \$45,020.00 45,020.00 (\$ 3,770.00)

The President then invited the Counsellors and Delegates to submit questions or make any statements concerning the financial affairs of the Association. After discussion the

President called for a motion to adopt the budget for 1967, containing the dues increase. The motion was made by R. W. Williams, M. D., seconded by D. F. Sullivan, M. D. There being no further discussion, the motion was unanimously passed.

APPOINTMENT OF REPRESENTATIVES TO BLUE CROSS-BLUE SHIELD BOARD OF TRUSTEES:

Dr. Hill next reported that the Board of Censors had named Drs. Paul W. Burleson and Hugh Gray to three-year terms on the Blue Cross-Blue Shield Board of Trustees to succeed Dr. I. A. Koffler and Dr. J. W. Boggess, III, whose terms expire in March, 1967. On motion of E. Bryce Robinson, Jr., M. D., seconded by J. Paul Jones, M. D., the nominations were confirmed.

ADJOURNMENT:

There being no further business to come before the College of Counsellors and House of Delegates, the meeting was adjourned.



"Male or Female?"

Reprinted from the **Nebraska Medical Journal**

Coronary-Risk Men Helped Through Diet

A substantial decrease in coronary heart disease was seen in New York men who modified their diet for five years as members of an anticoronary club. The incidence of coronary events among 814 men—40 to 59 years of age who volunteered for the study in response to newspaper and radio announcements—was only a third as great as that among a control group of 463 men of the same age. Reductions in obesity and high blood pressure were also noted in the study group. These conditions remained unchanged in those who did not use the special diet. In volunteers aged 40 to 49, the heart disease incidence rate was about half that of the non-dieters: 339 per 100,000 among dieters and 1,331 per 100,000 in the control group. The study—to test the hypothesis that reducing serum cholesterol in the diet will also reduce coronary heart disease—has been conducted since 1957 by the Bureau of Nutrition of the New York City Department of Health. Through serum cholesterol determinations, high-risk patients—candidates for the diet—are found. The diet—called a prudent diet—offers a form of preventive therapy which may become a basic factor in deterring development of coronary heart disease. Emphasis in the diet is on citrus fruits, green vegetables, grains and cereals. Beef, mutton, and pork are limited to four meals per week; poultry and veal four or five times a week; and four fish meals weekly are required. A margarine high in polyunsaturated fat replaces butter and a minimum of one ounce of vegetable oil is given daily. Ice cream, hard cheese, and pastry are avoided. (G. Christakis, M. D., and others: "Effect of the anti-coronary club program on coronary heart disease risk-factor status," *The Journal of the American Medical Association*, 7 November 1966).

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Urine test results with LABSTIX Reagent Strips can represent significant guides to differential diagnosis or therapy in many conditions. An unexpected "positive" may enable you to detect hidden pathology—long before more recognizable symptoms become evident. Negative results, which permit you to rule out abnormalities in a broad clinical range, can serve as baseline values for reference in future examinations. The 5 colorimetric test areas encompassed on LABSTIX Reagent Strips are:

pH—values are read numerically in the essential range of pH 5 to pH 9.

Protein—results are read either in the "plus" system or in mg. % in amounts approximating "trace," 30, 100, 300, and over 1000 mg. %.

Glucose—provides a "Yes-or-No" answer for urine "sugar spill."

Ketones—detects ketone bodies in urine—both acetoacetic acid and acetone. Reacts with as little as 5 to 10 mg. % of acetoacetic acid.

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Medicine's PR Problems

Otis D. Wolfe, M. D., Marshalltown, Iowa

The attitude of the public toward the American Medical Association could probably be put in two categories. On the one hand are those who think the AMA is bigoted, reactionary, avaricious and self-serving. On the other hand are those who are downright unfriendly.

I've heard it repeated with wearisome regularity that the AMA is a tightly run trade union exercising tyrannical power over its members . . . that the AMA controls medical schools so it can limit the number of physicians to keep competition down and fees up . . . that because of AMA policies this country is not turning out doctors fast enough to keep pace with the growth in population . . . that the AMA spends most of its corporate energies, and money, in politics . . . that the AMA has opposed every progressive public health measure ever conceived.

I thought I had heard them all. But I failed to reckon with the inventiveness of the liberal mentality. There is just no area where the AMA has any immunity to criticism. Who among us could imagine that the riots in the Watts area of Los Angeles a year ago were, in part, the fault of organized medicine.

Edward P. Morgan, who can be heard week nights on a labor-sponsored radio program, turned this trick in a column published in the *AFL-CIO News* July 9.

He takes the position that one of the problems in Watts is that the area has no hospital. The poor of Watts, therefore, must journey to the Los Angeles County Hospital where, according to Mr. Morgan, they are involved in a kind of patient run-around.

(This paper by Dr. Otis D. Wolfe was first presented during the AMA's 1966 Public Relations Institute last August, MSMA representatives who attended the Institute recommended its publication in *Missouri Medicine* as an example of the challenging and stimulating program in which they participated.)

Let me quote from his column:

"Who wins the Oscar," he says, "for such miserable performance in public health? Petty politics, patronage, inter-agency jealousies—all play supporting roles. But for the chaotic and wasteful inadequacy of American public health services today, we have largely to thank the heavy in this tragic drama, organized medicine. Doctors, or more accurately, their professional front, the American Medical Association, wanted it that way. The AMA has fought public health programs every inch of the way."

Mr. Morgan as a clincher, quotes an unnamed doctor as saying that "The AMA's classic approach has been to keep diseases of the poor among the poor." This latter sentence means that the AMA doesn't like poor people.

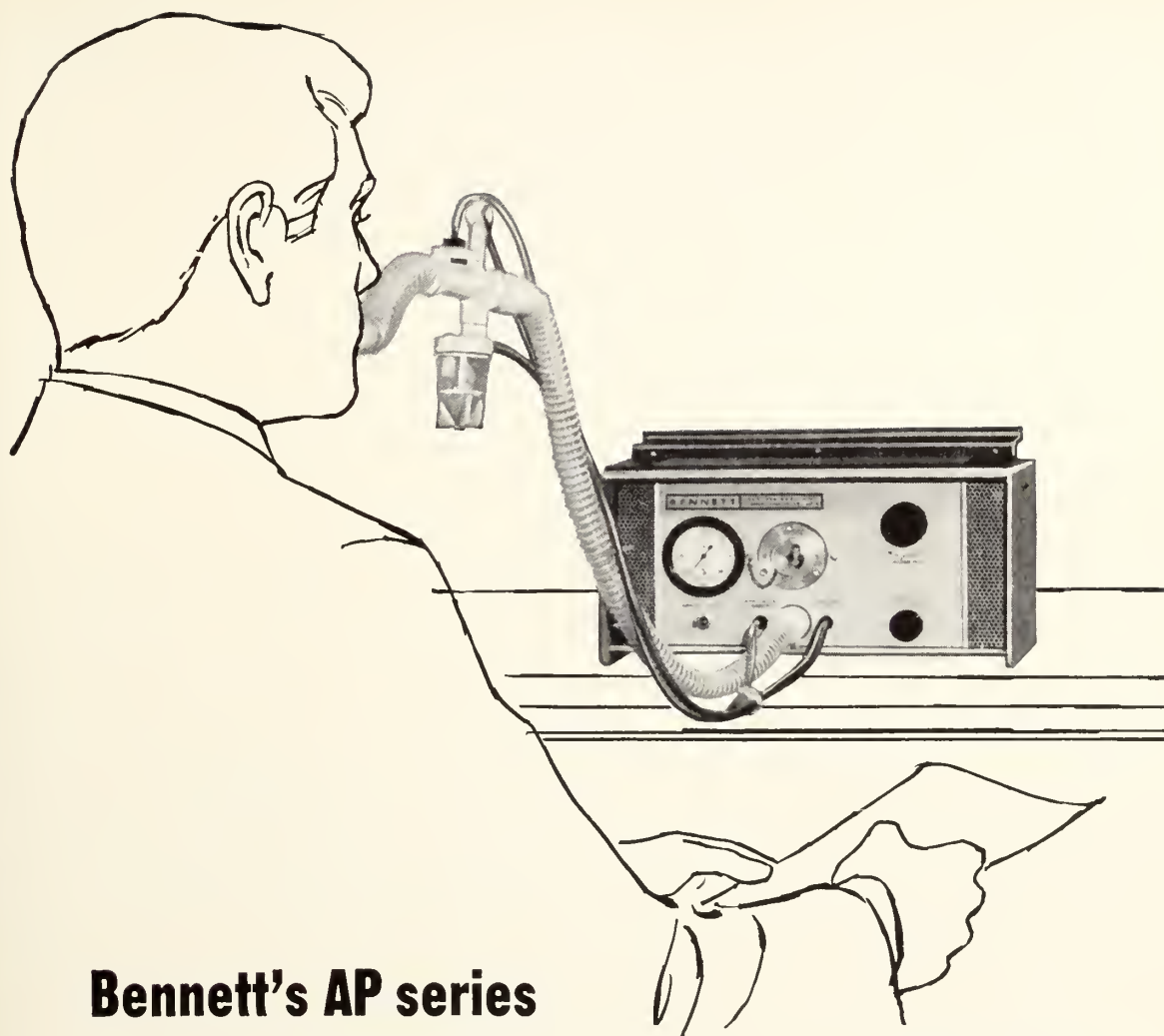
Now, I know that some physicians like to believe that since the adversaries of the medical profession have finally installed Medicare, their appetite for socializing us has been appeased. Mr. Morgan's allegations—as transparent and incredible as they are—appear to me ample evidence that our antagonists are more gung ho for our collective hide than ever.

We are gathered here to talk about public relations problems of the medical profession. We have some. We'll have more, many more. Our adversaries are numerous. They are organized and disciplined. And they are intent on discrediting the medical profession and destroying our influence and prestige as an organization.

It is my conviction that we have only begun to feel the full force of their attack. Our most vulnerable flank is Public Relations, and it is time that we understand some essential truths about these relations.

How successfully we cope with the prob-

(Continued on Page 1116)



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(Continued from Page 1114)

lem depends on how well we evaluate ourselves. Just where does the fault lie? In what manner can organized medicine, at any level, project a good or bad image?

Physicians who lament the loudest that the AMA or the State and local societies are projecting poor "images" are likely to be those who know nothing about these organizations, who rarely, if ever, attend any of their meetings and have never served on any of their councils or committees.

If, when the AMA is attacked, they shrink from identification with the Association, it is mainly because they don't have enough knowledge to know whether the charges are true or false. Someone has said that honest doubt is the beginning of wisdom, and the AMA would suffer less if these physicians would at least doubt the charges until they could learn the truth. And the truth is that most of the charges against the AMA are false. A statement is not automatically true because it is published in *Look*, *Harpers*, or *The New Yorker*, or in an editorial in the *St. Louis Post-Dispatch* or the *Louisville Courier-Journal*, or is made by a federal official or a spokesman for a labor union.

It is easy—and too often fashionable—to grouse that the poor image of medicine is the fault of the AMA. We tend to forget—or refuse to acknowledge—that medicine's public relations start with the doctor and his patient. We are inclined to overlook the basic truth that, in the last analysis, an individual's opinion of the medical profession is usually colored by his experience with an individual doctor.

Two years ago at this Public Relations Institute, a non-physician speaker made that point rather forcefully. He recalled that a friend of his, an elderly woman, frantically called her doctor early one morning. Her husband was desperately ill. The physician told her to give him a sedative and bring him to the office anytime before noon. Not long afterwards, she held a dead man in her arms, the victim of a heart attack. Although this

woman is to the right of Benjamin Harrison in her political philosophy, our speaker said, she's all charged up for socialized medicine because she thinks it would punish doctors.

A member of the AMA staff, who lives in a western suburb of Chicago, told me about a fellow commuter whose wife recently called their physician and asked if he could stop by to look at their daughter. She told him the girl's face was flushed and she had a temperature of 103. The physician, who was making hospital rounds replied: "I don't have to come out and see her. I know what she's got. It's all over town. I'll call the drugstore and have a prescription made up." Some time later, a girl in the doctor's office called the mother and said: "The doctor forgot to ask you how old your daughter is. He has to know because of the prescription." The woman asked to talk to the doctor. The girl replied that he was busy and couldn't be reached. "I want to know," the woman said, "what kind of medicine the doctor is prescribing." "I'm sorry," the girl answered, "we're not allowed to give out that information."

Would it surprise you that this woman's anger has been communicated to all her neighbors? By tranference, any mention of the AMA and its legislative problems, or any of its constructive programs, now evokes an unfriendly scowl from both husband and wife.

In all candor, let's ask ourselves how the AMA or any County or State Society, can polish up the image of medicine tarnished by incidents such as these. It takes only a few such episodes to quickly erode any medical society's public relations program.

Let us make several points eminently clear. Whenever one hears tales such as these, he realizes that there are probably unreported voids in the stories. Secondly, any physician knows that given the right circumstances, the same catastrophe could befall him.

On the other hand, whereas the vast majority of physicians are honest, conscientious,

(Continued on Page 1119)

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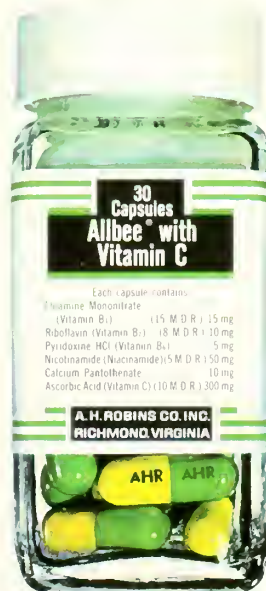
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Brief summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

(Continued from Page 1116)

dedicated and sympathetic—deeply and warmly devoted to the welfare of their patients—we do have an occasional scoundrel. And that classic cliché—one bad apple can spoil a barrel—is still appropriate. And such lapses in human relations can multiply the public relations problems of all the medical profession, including the State and local societies and the AMA.

These are the chinks in the edifice of medicine . . . and the question is: What should be done, what can be done, about them?

There is a disheartening amount of grumbling from patients about overcharging, tiresome reception room waiting, refusal of physicians to make house calls (even in emergencies), impersonal attention, unsympathetic even discourteous receptionists and difficulty in reaching the doctor. More and more people are questioning physicians' competence. A stock joke among comedians is that if you're going to be sick on Wednesday, do it on the golf course.

When only 40% of the people in a nationwide public opinion survey say that doctors treat patients as human beings . . . when less than half the people think doctors are sincerely devoted to their work and try to keep abreast of latest developments in medicine . . . when these are the responses you get when you talk to people, it indicates that we can't afford to be smug about our image as individual physicians. These were among responses to a survey conducted by the Opinion Research Corporation last year.

If only 12% of the people we serve believe that doctors try to keep charges as low as possible, and only 13% say doctors discuss fees in advance, we've got a problem, and we can't make it disappear by ignoring it.

These are public relations problems that belong, fundamentally, to the individual physician, not to the societies or the AMA. An overcharge or a refusal to make a house call in an emergency are acts of individual doctors, not medical societies, and not the AMA. When they occur, they reflect discredit on

doctors, not on medical societies or on the AMA. Medical public relations, as we said earlier, start with the doctor and his patient.

Nevertheless, the physician-patient relationship can compound the public relations problems of the medical society and the AMA. The patient who thinks he has been overcharged, for example, is not likely to accept with good cheer a statement from the AMA that physicians' fees have risen less in the past 20 years than other things he now buys, even though it is true. And the patient who can't get a doctor in an emergency doesn't have much sympathy with a news release from the AMA that the physician population has been increasing faster than the general population.

Indeed, he is more apt to become receptive to any proposal that would change the entire system. He is more readily persuaded that socialized medicine would be a good thing because doctors would have to make house calls and the government would fix physicians' fees.

I believe we would all agree that the AMA could do more than it has in the public relations field, and it could probably have done better with some of its efforts in the past. More could be done, I'm sure, toward acquainting the public with facts about medical care costs, about emergency call services and grievance committees, about physicians' fees and about other areas of medical practice where lack of knowledge may breed distrust.

It's discouraging enough that so few laymen know anything at all about the AMA. But it's downright disheartening that so many physicians know so little about their national organization. The fault must lie in part with the AMA and, to a lesser degree, with the State and local societies. But certainly the individual physician has some obligation to inform himself about the activities of his own professional organizations.

However, I believe most of the AMA's public relations problems stem, not so much from

(Continued on Page 1122)

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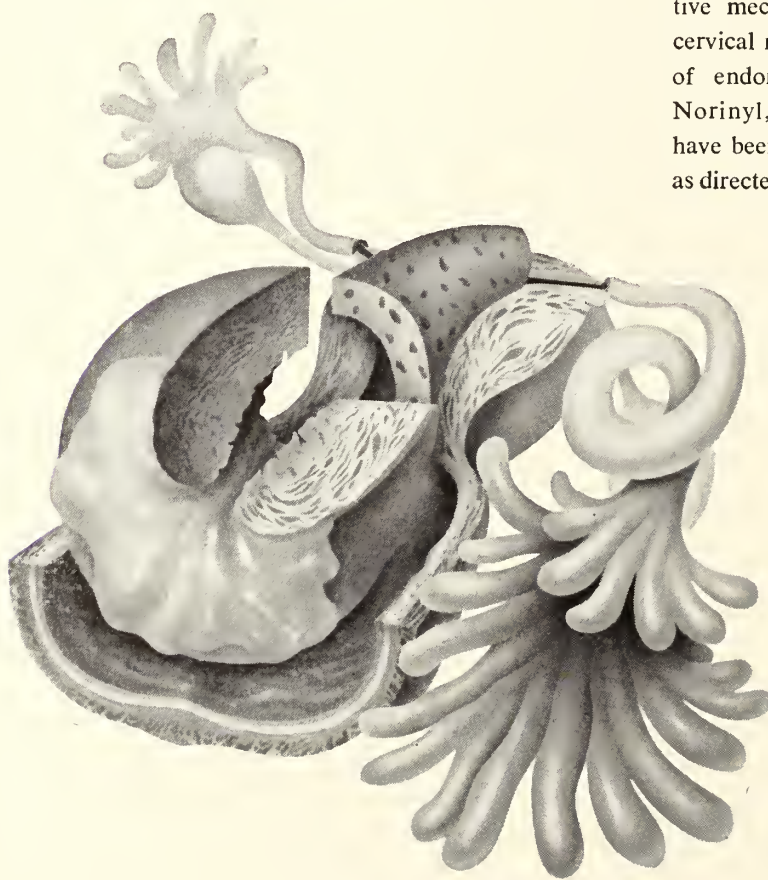
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An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb 29) 1964. 2. Bravans, F. E.: Canad. Med. Ass. J. 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med. Clin. N. Amer. 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med. Sci. 16:26 (Nov.) 1965. 5. Hammond, D. D.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil. Steril. 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil. Steril. 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N. Carolina Med. J. 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl. Ther. 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. L.: Appl. Ther. 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med. Sci. 16:26 (Nov.) 1965.

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(Continued from Page 1119)

what it has or has not done, but from what others have said it has or has not done.

Unfortunately, many members of the Fourth Estate, many college professors, many public officials and many labor leaders interpret freedom of speech and freedom of the press as license to peddle false charges against the AMA, in particular, and the medical profession, in general. None of them is even faintly interested in talking or writing about the scores of worthwhile programs of the Association. It is also a sad fact of life that a multitude of people, including physicians, are willing to believe any and all allegations against the AMA. They entertain the naive theory, I suppose, that the authors would be afraid to utter such statements if they weren't rue.

The merchants of falsehood, whose objective is to substitute government coercion for individual responsibility in the field of medicine, pose the AMA's toughest public relations problem.

What can be done about them? What can be done about the author who misuses infant mortality and other vital statistics in a blatant attempt to persuade the American people that medical care in this country is inferior to that in countries where medicine is socialized? What can be done about the author who selectively quotes 20-year-old studies to support his charge that U. S. hospitals are death traps and who willfully ignores current and contradictory evidence? What can be done when the publisher will do no more than acknowledge receipt of a letter documenting in detail the extent of this author's dishonesty?

Twice in the last year or so, University professors have written lengthy diatribes against the AMA which were published in church magazines. No one at the AMA was offered the opportunity to rebut either article before publication. But in both cases, when rebuttals were prepared and submitted to the magazines, they were turned over to the professors. Their replies were published with

the AMA rebuttals, giving the authors a chance to repeat earlier false charges and add new ones.

This curious standard of justice and its opposite—a refusal to right a wrong by publishing any kind of reply at all—is somewhat frightening, made more so by the knowledge that leading magazines will publish scurrilous articles against our profession without even a pretense at verifying the truth.

For example, last March, a national magazine with several million circulation published an article purporting to be an objective study of what the author chose to describe as death threats in U. S. hospitals. The author cited a study published in 1961 concerning anesthesia deaths and interpreted the findings as indicating that "33,000 lives are either 'definitely' or 'possibly' lost each year because of anesthesia."

The author of the magazine article did not reveal that the study was made in the period 1947 to 1957 and that, at best, the findings were 10 years out of date. But even worse, the author ignored this significant statement by the physicians who conducted the study (and I quote): "A survey of our mortality data for 1960 and so far in 1961 indicates a paucity of deaths attributable in any way to anesthesia."

That was the character of this article from beginning to end.

That article and others like it fairly illustrate the dimensions of this particular public relations problem which regularly confronts the AMA and the medical societies.

Lord Byron once said: "Adversity is the first path to truth." It may be that we will gain less in fighting adversity than in using it to our advantage.

Those who would destroy the system of medicine would first destroy the image of medicine. If we put our own house in order—if we convince our patients by our deeds that their interests are paramount with us—then the American people will be less and less inclined to believe those who are dedicated to destroying medicine as a free institution.

The hour is late and the tide of battle is against us. The purpose of this panel is to explore better methods of combat for the physician, the local society and the AMA.

We must first of all recognize the opposition, his purpose and his method. Secondly, we must appraise our deficiencies and correct them. Finally, we must all be headed in the same direction with a unity of purpose.

And the time for this, ladies and gentlemen, is NOW.

The AMA Convention— And Why We Go

Buckminster Fuller, The American architect-engineer-philosopher-poet, has predicted that education will become the largest and most important of all industries.

He bases this on a belief that knowledge is the one resource of man which not only cannot be depleted, but can, indeed, be consciously increased. In the advanced, automated world of the near future, he says, "leisure" time gained from the workaday world through automation may be spent in the classroom; in fact, people may be paid to go to school.

Physicians have long understood the value of knowledge—of education.

We are forever involved in the task of "keeping up"—without pay it may be noted.

There are few physicians who regard the task as onerous, however. "Keeping up" is part of being a physician; it is a privilege and a responsibility.

A number of reservoirs of medical information may be tapped by the physician. These include colleagues, medical journals, medi-

cal news publications, continuing education courses, medical meetings and conventions, drug detail men, and miscellaneous others.

Every year there is the "big show" where the physician can tap practically every reservoir: the Annual Convention of the American Medical Association.

At the 1966 Annual Convention about 600 scientific papers were presented, and nearly 300 scientific exhibits were on display as well as hundreds of industrial exhibits.

No other medical meeting in the world matches the range of subjects presented, from reviews of general medicine to experimental medicine and therapeutics.

The 116th Annual Convention of the American Medical Association will be held in Atlantic City June 13-22 this year. Convention Hall and surrounding hotels will house the Scientific Program; the House of Delegates will meet at the Chalfonte-Haddon Hall Hotel.

Among special presentations planned are four general scientific sessions on backache, healing, patient care, and sex.

The 22 Scientific Sections will offer programs individually, and many will hold joint meetings on subjects of common interest. A full schedule of medical motion pictures is planned. At least five color telecasts will be broadcast, live from a Philadelphia hospital in cooperation with the University of Pennsylvania School of Medicine.

If knowledge is a resource, as Buckminster Fuller says it is, the AMA Annual Convention is surely a mother lode.

Unchecked—It happened very gradually—
In slow and easy stages, But finally my deductions—have caught up with my wages.

Average Radiation Exposure Not Alarmingly High

Americans received an average annual radiation dose of 55 millirads to their reproductive organs as a result of exposure involved in medical diagnostic examinations in 1964, a Public Health Service study has revealed.

The figures (55/1000 of a rad, or unit of absorbed radiation) was described as giving no cause for alarm by Dr. Russell H. Morgan of Baltimore, chief radiologist at Johns Hopkins University and chairman of the Surgeon General's National Advisory Committee on Radiation. The estimate is lower than most previous guesses and is based upon the first U. S. nationwide study, he said.

The current figure compares with results of smaller U. S. surveys and with several national studies in other countries. Dr. Morgan pointed out that Americans now receive an average of twice as many x-ray examinations in a year as do residents of most European countries. "Our level of usage will continue to rise, requiring continuing care to minimize radiation hazards," he predicted.

The government survey indicates that medical diagnostic radiation accounts for only about half as much absorbed dose as the 120 millirads of natural background radiation received annually in most parts of the country, pointed out Dr. Richard H. Chamberlain of Philadelphia. Dr. Chamberlain is professor of radiology at the University of Pennsylvania and chairman of the Public Health Service Medical X-ray Advisory Committee.

"We have no acute problem and no indication of major excesses in radiation exposure for diagnostic purposes," said Dr. Chamberlain. "But there is room for improvement and we feel an obligation to achieve the greatest efficiency in the use of radiation for medical purposes."

The 55 millirads included an estimate of 53 millirads from film procedures and only two millirads from fluoroscopic examinations. This is true despite the higher exposure in-

involved in fluoroscopy because relatively few persons require the more complex studies and because many of those who have passed beyond their reproductive years, explained Dr. Raymond T. Moore of Dallas, deputy director of the PHS National Center for Radiological Health.

The genetic exposure is a cumulative measurement of the amount of radiation reaching the gonads of all persons in a population before or during their reproductive years. With the internal location of a woman's ovaries and the exposed position of man's testes, both in the lower abdominal region, radiation exposures in this area contribute most of the genetic dose.

Half of all diagnostic x-ray studies are chest examinations but these contributed only four millirads of genetic exposure, according to the PHS estimate. Examinations of the colon accounted for 10 millirads, those of the lumbar or lower spine were rated at 10 millirads, intravenous pyelograms (kidney studies) came to seven millirads, views of the pelvis resulted in four millirads of genetic dose and studies of the upper gastro-intestinal system produced only three millirads. All other examinations including the head, neck, arms and legs accounted for 17 millirads of the annual total of 55.

Exposure to men accounted for 44 millirads, exposures to women 10 millirads and those of unborn children one millirad. This correlates with estimates derived earlier in the survey that men receive more x-ray studies than do women during their early adult years, both in terms of films and of fluoroscopy, said Dr. Moore.

Figures taken from the PHS nationwide survey of radiation usage were related to dose received by reproducing and measuring sample procedures received by patients in the sample. These figures were correlated with special dose studies conducted by Drs. Mor-

gan, Chamberlain and H. S. Weens, chairman of the department of radiology at Emory University in Atlanta.

"The physician's concern must be to limit the amount of man-made radiation added to the population genetic burden," said Dr. Morgan. "The exercise of greater care in several regards, particularly in limiting the areas of the body included in the exposure during x-ray examinations, could result in a reduction of the annual genetic dose, despite even greater uses of x-rays in medicine."

An earlier segment of the national x-ray usage study indicated that excessive beam size was the fault found most frequently in routine x-ray examinations. The size and shape of an x-ray beam for a given examination can be controlled by the use of controls on x-ray machines.

A year ago, the PHS group reported that some 67 million Americans received 115 million medical diagnostic x-ray examinations during 1964. Such examinations ranged from a single film exposure to check possible finger fractures to complex procedures of the brain or kidneys involving a dozen or more films and extensive fluoroscopic exposure.

The figure of 120 millirads of background radiation exposure was cited by Dr. Chamberlain from a current estimate by the National Council on Radiation Protection and Measurements. It refers to radiation received from cosmic radiation, naturally occurring radioactivity in the soil, in building materials and even in food and body substances, such as potassium. This background varies from place to place but at least this general amount is received by everyone, Dr. Chamberlain said.

Patient Care One Of 4 Topics Of General Sessions At 1967 AMA Annual Convention

Patient care, from the standpoint of standard methods as well as research, will be one of four topics presented in general scientific sessions at this year's Annual Convention of the American Medical Association.

The Convention is to be held in Atlantic City June 18-22; the Scientific Program will be at Convention Hall, and nearby hotels, and the House of Delegates will meet at the Chalfonte-Haddon Hall Hotel.

The General Scientific Meetings are open to all physicians attending the Annual Convention.

Other General Scientific Meetings on this year's Annual Convention program will be on the subjects of: backache, healing and sex.

In addition to the General Sessions, each

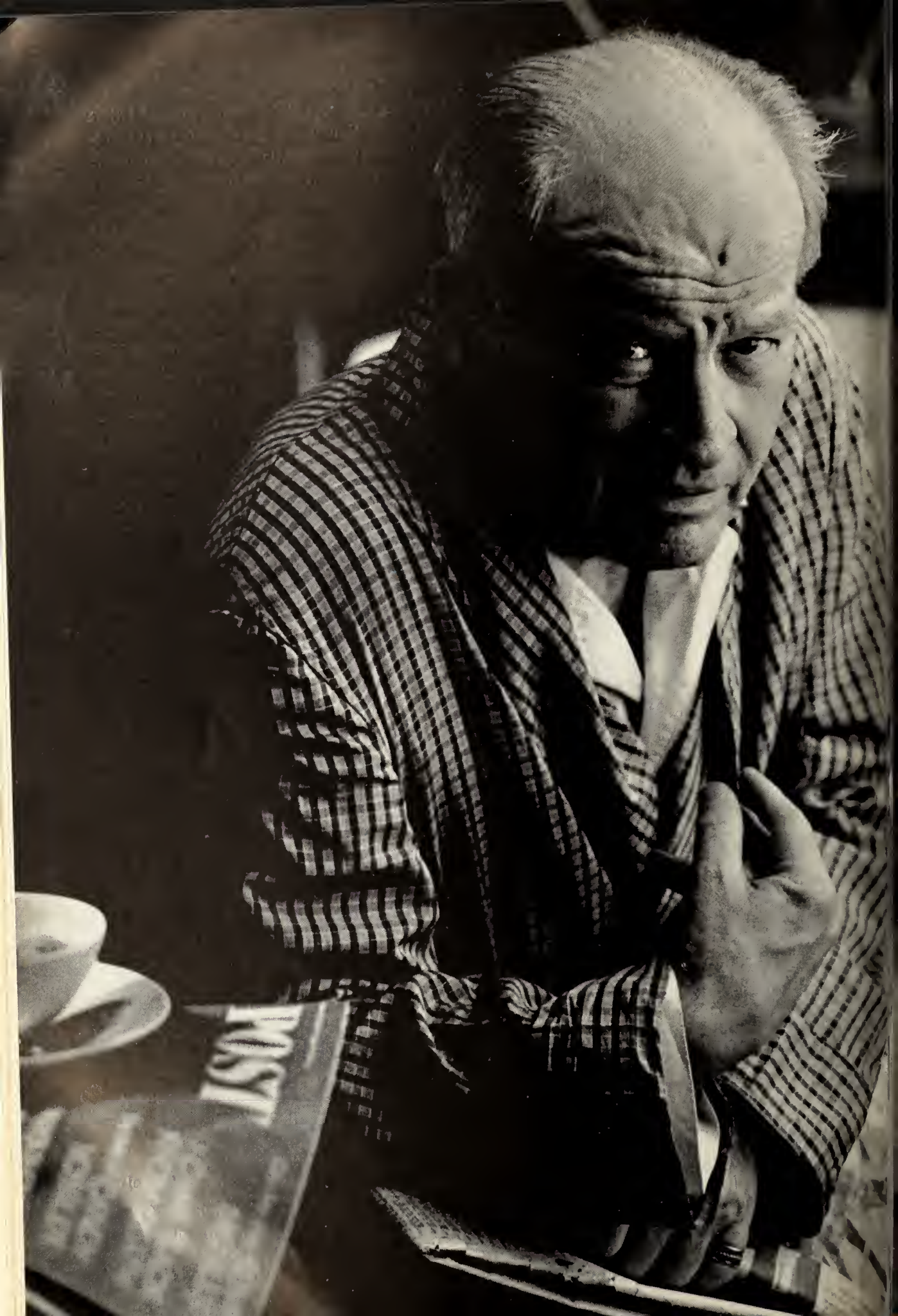
of the 22 Scientific Sections will present scientific programs. Many of the Section programs will, as in past years, be joint meetings of two or more Sections and, in some instances, a specialty society.

Specialty societies joining AMA Sections will include:

—The American College of Chest Physicians, which will join the Section on Diseases of the Chest for a program.

—The American College of Cardiology, which will join the Section on Internal Medicine in a session.

—The Society for Investigative Dermatology, Inc., which will hold its meetings in conjunction with the Section on Dermatology.



I'm supposed to get up and do things?

With my heart?

It's entirely natural—and may even be desirable—for the cardiovascular patient to be somewhat anxious about himself.

But when anxiety leads to unreasonable self-imposed limitations and restrictions . . . when it aggravates cardiovascular symptoms . . . when it interferes with restful sleep, measures to help alleviate the anxiety are probably in order.

One measure, of course, is reassurance. Another, adjunctive measure, is EQUANIL (meprobamate).

Over a decade of experience has shown that EQUANIL (meprobamate) is generally well tolerated as well as effective. Side effects are usually limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose

should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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alone or secondary to organic disease

Equanil[®]
(meprobamate)





now NovestrolTM (ethinyl estradiol U.S.P.)

estrogen replacement therapy

for the menopausal syndrome and female hypogonadism. Novestrol, a pure synthetic estrogen derivative, is related to estradiol which is the primary hormone of the ovarian follicle. It is effective orally and has all the actions of naturally occurring estrogen.

Ethinyl estradiol is the most active estrogen known. In addition to its high potency, Novestrol offers patients the advantages of minimal side effects, low cost, and convenience. Usually only a single daily dose is necessary.

Description: Each green, sugar-coated tablet contains 0.02 mg. of ethinyl estradiol U.S.P., a pure synthetic estrogen derivative, the most active estrogen known.

Indications: Menopausal syndrome and female hypogonadism.

Contraindications: Patients with tumors which estrogen might stimulate.

Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

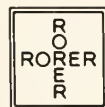
Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.



WILLIAM H. RORER, INC. Fort Washington, Pa.



Alabama Department of Public Health



The Role Of Primary Prevention In Public Health*

E. G. McGavran, M. D., M. P. H., Former Dean

School of Public Health

University of North Carolina

Chapel Hill, North Carolina

For a few minutes, I would like to discuss the role of primary prevention, an implication in public health that is not yet *generally* accepted and probably not accepted by most of us here today.

Primary prevention relates to preventive procedures that affect the total community, that change the environment or the reactions to the environment of populations or of groups. Secondary prevention is that prevention which affects the individual. Through the years, we have taught, believed, and preached that we could control disease, eradicate disease, improve the health of people by secondary prevention. This is firmly held by most physicians and most people. As a matter of fact, nine-tenths of all the funds, personnel and the effort in this world go toward secondary prevention, early diagnosis and treatment of disease, immunization of individuals. What I want to present to you

is the fact that in the whole history of the health phenomena, as we go back over the centuries, there is absolutely no evidence that in any instance there has been control or eradication of any disease through early diagnosis and treatment of disease, or through individual immunization. Now, this is an extremely radical statement and completely unacceptable to most of the world today. I don't want you to take my analysis or word for it at all. I want you merely to look at this particular situation for yourselves and analyze the situation as you know it and as you may study it. If this be true, then nine-tenths of all of the efforts which we are presently carrying out; and I say nine-tenths very generously; is destined to failure and ineffectiveness.

Let's just look at the record. Start off with any of the diseases which we frankly consider as conquered or controlled or eradicated in any country. Let's start off, for example, with hookworm, a disease which not too many years ago was a very common disease in this part of the United States and many parts of the United States. Every effort was made to eradicate this disease. As a

*Informal remarks at International Seminar on Planning for Health Education, sponsored by the Department of Public Health Education, School of Public Health, University of North Carolina, Chapel Hill, North Carolina, July 19-21, 1962.

matter of fact I was involved in a good many of these in Egypt, in the southern part of the United States, and in other parts of the world. We went in there with new methods of early diagnosis, treated them effectively, and cured them; and within a year they were back as heavily infested as ever. It simply didn't work until we changed the approach in hookworm disease and controlled the environment; and then the disease disappeared in every area where we controlled the environment. Malaria has the same story. New drugs, better diagnosis, more knowledge, etc. surely were a help, but they didn't change the picture in this country or any place in the world. The picture remained unchanged until we modified the environment or the reaction to the environment. The same is true of yellow fever, plague, cholera, etc. Anything which has changed the whole nature of disease and the reactions of peoples, that has changed the longevity, that has brought about all these changes which we are hoping for in the health field has not occurred through early diagnosis and treatment.

Of course, you will immediately say, "Well, now, what about syphilis?" Here is a disease that is also very common, and our approach to this has been a direct, early diagnosis and treatment approach, with millions and millions of dollars being spent in this country, lots of personnel, lots of health activity, public health activity, directed toward it. The evidence is, of course, quite clear in this situation. If you look at the record of the United States you see that back in 1900 the rate of infectious syphilis was relatively low and it rose steadily until 1950, despite everything that was being done. By 1950 it dropped off; everybody said, "Ah, here's the exception that proves the rule." Some of us weren't very happy about that conclusion, because we felt there were some other factors involved. And sure enough, it started back up again. We now know very definitely what happened here in this period. There was mass prophylaxis by indiscriminate use of penicillin. We have checked this so that there is very little question in our mind that

what happened in this period was that there was enough penicillin given over the counter and in general so that we actually had a mass prophylaxis—we changed the environment for the spirochete, so we got results for the first time. Then penicillin was shown to be very dangerous and we quit using it, and syphilis started right back up again. We *did* change the *results* of syphilis by early diagnosis and treatment, and we eliminated a lot of the bad effects of the infection, but not the way infectious syphilis itself continues up.

Let's take another thing that immediately comes to your mind, and that, of course, is tuberculosis. You say, "Here our major approach has been early diagnosis and treatment of tuberculosis, and look how tuberculosis has come down as a result. It has come down steadily since we've applied early diagnosis and treatment." Well, all of this is very nice, except that when we look at the picture epidemiologically across the United States—and I think it would probably be true elsewhere—you find that the rate of decline of tuberculosis in the United States has, by and large, been faster in areas where they weren't practicing good public health and early diagnosis and treatment. In areas where they didn't have adequate hospitalization, and in communities where they didn't have good public health activities, clinics and diagnostic facilities the rate has declined more rapidly than where they did. There is no correlation between the facilities which we have and the rate of decline. There is most correlation between the rate of decline and improved economic status, housing, and things of this sort, but no correlation between early diagnosis and treatment. When you mention this the tuberculosis people just jump up and down and scream bloody murder, because this just denies everything which they have been preaching and teaching, everything that *we* have been teaching and preaching in public health. We have been telling all of our students that the way to control tuberculosis is through early diagnosis and treatment. We tell our Legislature

in North Carolina that the way to control tuberculosis in North Carolina is to appropriate five million dollars so we can build another hospital right here on the campus and do a lot better job; so they do; but they won't appropriate ten thousand dollars to do something which would really control tuberculosis. Why? Not because they are recalcitrant, but because nobody has the intestinal fortitude to tell them that what they are doing isn't going to change the picture in tuberculosis in North Carolina or any place else.

Let's not look at the past too much. Let's look at the future. What does this mean as far as the future is concerned?

Before we go on to that, though, I'd like to point out one thing. There always must be an exception to the rule. I'm not sure but what we have two exceptions to this rule. I haven't had the opportunity to do it yet, but I want to explore these. In the case of trachoma and yaws we may have exceptions, where early diagnosis and treatment, in a sense, has controlled. Maybe this is because in these instances what we have been doing is really mass treatment, not individual treatment, and the mass approach is really controlling the environment. This needs to be explored. Even if we find rare exceptions to it, the fact remains that in a vast majority of cases this is the story.

One of the most dramatic situations that I can think of is the difference in this country in the results of the two different approaches of primary and secondary preventive measures that we've used. Those are the two differences that occur in typhoid fever and in syphilis. As we have indicated, with syphilis we have used the very finest of diagnostic techniques known to man—the most accurate, the easiest, the cheapest—with the most magic drugs ever conceived for a disease, from sodium-silver-salvarsan to penicillin, but the rate of syphilis went right on up. On the other hand, here was another disease, typhoid, for which until 1950 there was no diagnosis that was any good and there was no treatment. We trusted in God and good nurs-

ing care. Yet in the same 50 years, the disease almost disappeared in the United States. This was because we approached it not on an individual early diagnosis basis but as a community health program. We changed the environment, and the disease disappeared.

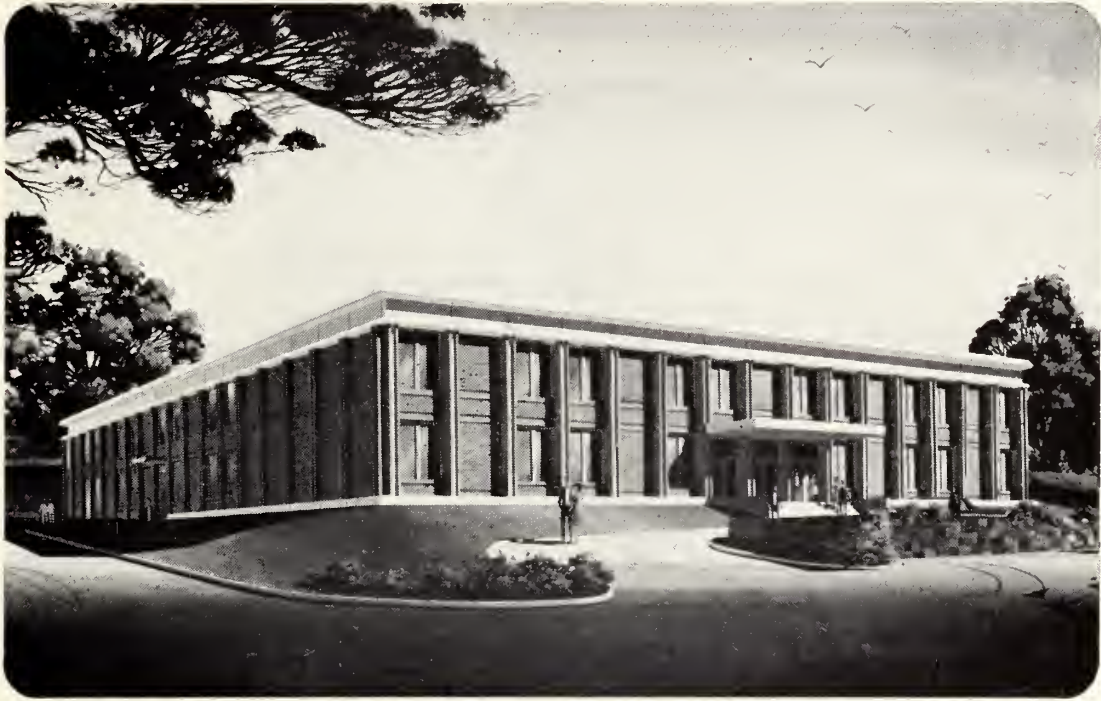
Let's take a look now at some of the chronic diseases. This, to me, is a major concern at the moment. Communicable diseases certainly responded this way, but what about chronic diseases? If you take the most prevalent chronic disease which we have, dental caries, the story is again identical. I spent some time in Finland and some of the islands of the Baltic where they had done a magnificent job of early diagnosis and treatment in children's dentistry, preventive dentistry. The dentist out there told me that after five years of intensive activity in a relatively small population group there was more dental caries than when he came. Unfortunately, this is the story. I worked with the Kellogg Foundation where we had unlimited funds that we poured into early preventive dental care for children, and at the end of the time there was more dental caries than when we started. This is not unusual. This should be expected. Yet we *can* change the rate of dental caries; we can improve it 60 per cent by changing the environment and adding fluoride to the drinking water.

What are we doing for the control of heart disease? Early diagnosis and treatment. What is happening? There is more heart disease, not less. And it's continually rising.

What about cancer? Early diagnosis and treatment, and boy, you can hear all the people yelling about Papanicolaou tests and other methods! They say, "We can set all this up and do a lot more early diagnosis and treatment." Sure, this is good, but what's happening to the rate of cancer? It's going up, not down. We're not attacking it in a way that is ever going to change the picture.

Look at mental disease, again one of the most common. What's happening with all the added hospitals, outpatient departments, par-

(Continued on Page 1134)



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

PARKWOOD HOSPITAL

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(Continued from Page 1132)

ent guidance, child guidance, and teacher guidance clinics, and all the rest of it? Is this reducing the rate of mental disease? No. It's going up. You should expect it to, because we're not changing the environment; we're simply making better early diagnosis and treatment. In order to change the picture in mental disease, what are we going to do? Well, very obviously we're going to have to find ways and means of changing the environment. What is producing the increase in the amount of mental disease today? What have we done to the environment that presently make this worse? I have my own private opinion on this, without any backing. I think that because of our child labor laws which prevent children from working now, our youngsters by the time when they reach the age when they are permitted to work are firmly convinced that the one thing in life they should try to avoid is work. And I don't think that this is a mentally healthy kind of situation. We could immunize against mental disease. We know this; we've already done it in many areas. Battle psychoses in the North African Expedition were reduced 60 per cent by putting the boys under live fire before they went into battle. This was straight immunization. Well, if you can do it in the battlefield, why can't you do it in the city? I'm not, however, advocating that we put our children under live fire. What we're really concerned with is experimenting in these areas and trying to get means of approaching mental disease through mass immunization, or mass control of the environment and reaction to it. This is the only way we can ever hope to get any result.

This to me, you see, is something which we are responsible for. You health educators are basically responsible for this. We have been teaching for years and years that the way to control disease is early diagnosis and treatment, and it's no wonder that the public responds this way. They've been told this; they've been taught this; and we failed to come out and say, "This is no good. This isn't the way you do it." Somebody needs to face

the facts. Somebody always says to me when we discuss this matter, "Why are you so opposed to good medical diagnosis and treatment?" I'm *not*. But I am somewhat conditioned in this regard. I come from three generations of medical missionaries in India and all they did for three generations was early diagnosis and treatment. They did do a tremendous amount of good. I remember seeing my aunt operate on cataracts and people who were blind—20 or 30 a day—would walk out seeing. The halt, the lame, the blind; this was a wonderful work. My earliest recollections are of going around into the various leper asylums. We had about seven of them that father used to visit, and despite the fact that there was very little cure at that time, the amount of good that was done was tremendous. I'm not belittling what good is done by early diagnosis and treatment. (Thank goodness for early diagnosis and treatment with my coronary, too. This is something that I can be thankful about.) There's nothing wrong with this, but the fact remains that after three generations there were more halt, lame and blind in India than when my family first went over there in sailing vessels around the Cape. This is the picture which we face around the world today. The trouble is that we have educated people to believe that they're going to solve their problems through early diagnosis and treatment of disease. That is why nine-tenths of all the money, the effort, the research, and the study goes into an avenue which doesn't have one ghost of a chance of success. Suppose we find a magic drug for cancer? Will this change the cancer case rate? No, it will go up and continue to go up. Yet a lot of people think that if we can just put enough research into finding a cancer cure, we will have everything solved. This is ridiculous. This has not happened in any other disease. Why should it happen now? Remember, we're not saying that early diagnosis and treatment isn't any good; not that it doesn't help the individual. We're not saying that it should be discontinued. We know that it is important. But, when you are looking, as we are looking today, at the public health pic-



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106th
Annual Session
Montgomery
April 20-21-22, 1967



ture, the proportion is all out of gear. We're putting so much of our money into this type of thing which is just a *stop gap*. We do this, not because we are "dumb" or "pig-headed," but because we have been educated to believe this is the way to do it. We have been misled, misinformed. And this whole thing is something which is really in the lap of health education, because we ourselves are responsible for perpetrating on the public all of this information. It was done in

good faith, but the fact remains that it is misinformation, it is misconception, it is misrepresentation, and it has produced misappropriation and misdirection in the whole control program. This is a pretty heavy indictment; yet, to me, we are faced with these issues, and I think that health education is among those that really have to look at this picture very seriously and come up with some solutions. I know it is hard to change, but this is the job of health education.

Patients Don't Always Follow Doctor's Orders

CHICAGO—Physicians have long known that some patients don't follow orders for taking medicine, or refuse to take it at all.

A report in the January 16 Journal of the American Medical Association indicates how frequently this can occur. Among a group of Cleveland tuberculosis patients, 15 (30 per cent) of 50 patients were uncooperative about taking one drug, and 14 (42 per cent) of 33 failed to follow doctors' orders for taking another.

"In the era of potent and dangerous medications, patient reliability in taking drugs becomes a primary consideration," the article said. "Most physicians are aware that some patients fail to take prescribed medicines, but few realize the extent of the problem."

The study started with clinic and pharmacy records at the University Hospital of Cleveland, which indicated that 50 persons in the outpatient department were supposed to be taking the drugs isoniazid and/or aminosalicylic acid.

It became apparent large numbers of patients weren't following directions when

urine tests failed to reveal any trace of the drugs.

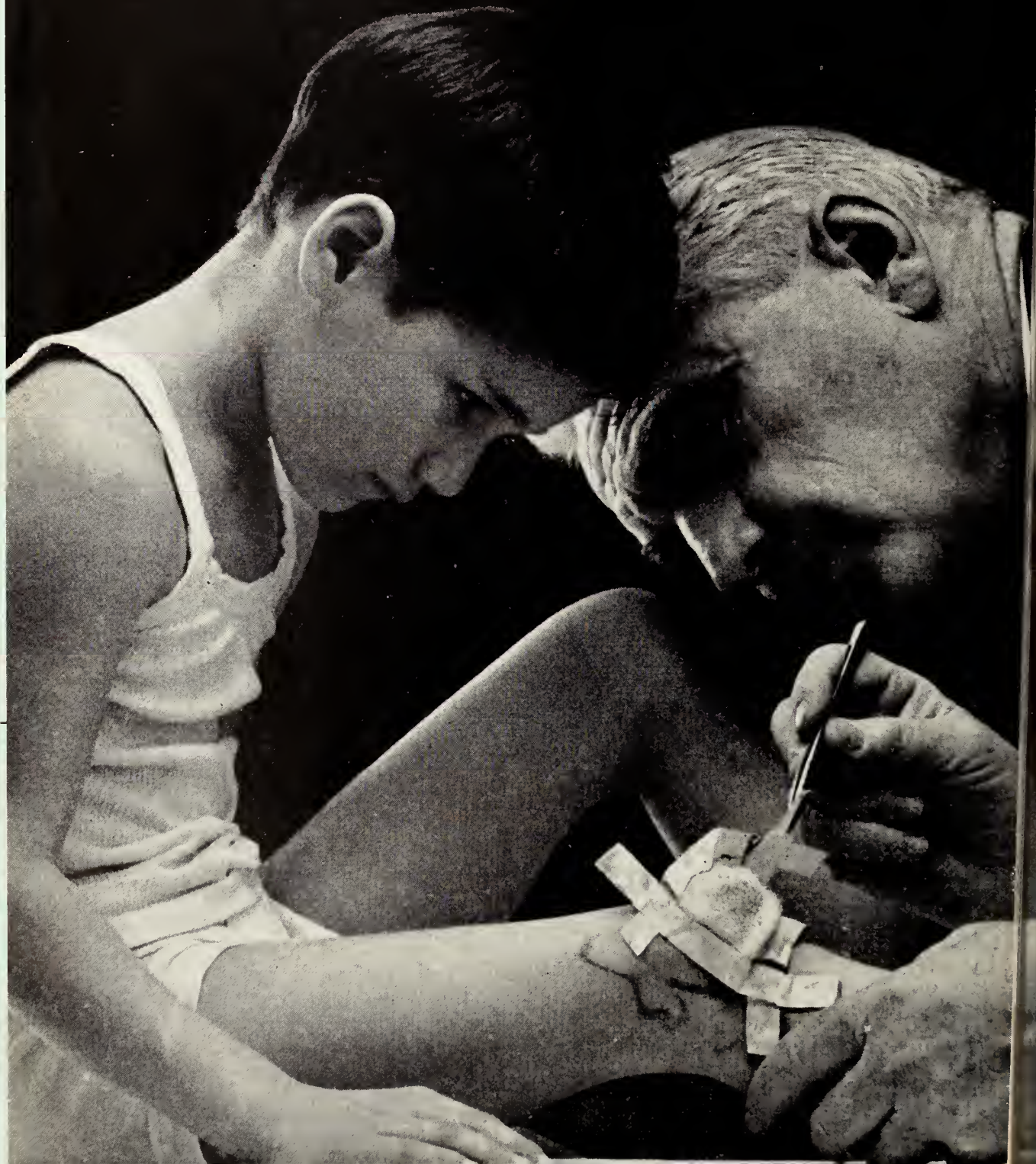
There were 20 men and 30 women patients, ranging in age from 17 to 78, with an average and median age of 45. Forty-eight were known to have tuberculosis. Forty-five were Negro and five, white. All but one lived in a poor downtown section of east Cleveland. Forty-five (90 per cent) understood perfectly the instructions for taking their medicines, the authors said.

"Detection of the patient who is not taking his medicine is difficult," the report said. "Simply asking him seems unsatisfactory since patients tend to claim that they have taken medicine when direct evidence indicates that they have not.)

An earlier study, for instance, indicated that 83 per cent of families claimed to have given a full 10-day course of penicillin to their children when evidence indicated that 82 per cent had stopped the medicine by the ninth day.

Some patients also tend to deny taking medicines when they have. One study found that 29 of 38 patients who had taken meprobamate, barbiturates, or phenothiazines denied taking these drugs.

Wounds, abscess, cellul



...and the complications of staph.

Staph reliably controlled with specific therapy

From time of birth, the child is exposed to a whole range of potential staph infections: wounds; secondarily infected dermatoses; primary lesions, such as deep impetigo (ecthyma), boils and felons; and more serious conditions such as osteomyelitis, staph pneumonia and staph meningitis.

Bactericidal

Hardly a staph organism can resist the bactericidal action of Prostaphlin® (sodium oxacillin), as shown by a 34-month *in vitro* study. Of all staph isolates tested, 99.5% were sensitive to oxacillin.¹

Clinically Proven

There is a high correlation between these *in vitro* findings and clinical results. Of 610 patients treated with Prostaphlin (sodium oxacillin), 89.8% were reported cured or improved, including those with staph infections resistant to penicillin G.² And since resistance does not appear to develop *in vivo*, therapy with oxacillin can be extended when necessary.

Outstanding Safety Record

Besides being staph-specific and rapidly absorbed—Prostaphlin (sodium oxacillin) has established an outstanding record of safety during five years of widespread clinical use. Continuous high blood levels of oxacillin have not produced toxic effects on kidney function, assuring a significant margin of safety. However, as with all penicillins, the possibility of allergic response should be considered.

Capsules, Oral Suspension and Injectable

Prostaphlin (sodium oxacillin) is available in three flexible dosage forms to suit the age of the patient and severity of infection—an oral solution for pediatric use, capsules, and multi-dose vials for injection.

PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q. 4 or q. 6 h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q. 4 or q. 6 h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY 8:12.16

References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N.Y. 2. Data on file, Bristol Laboratories.

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SODIUM OXACILLIN



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Bureau of Vital Statistics

PROVISIONAL BIRTH AND DEATH STATISTICS AND COMPARATIVE DATA

Ralph W. Roberts, M. S., Director

NOVEMBER 1966

Live Births	Number Registered During November 1966			Rates* (Annual Basis)		
	Total	White	Non-White	1966	1965	1964
Deaths						
Causes of Death						
Live Births	5,296	3,399	1,897	18.3	19.6	21.6
Deaths	2,638	1,746	892	9.1	9.6	8.9
Fetal Deaths	107	57	50	19.8	22.5	18.4
Infant Deaths—						
under one month	105	61	44	19.8	20.7	20.1
under one year	159	83	76	30.0	33.6	31.2
Maternal Deaths	2		2	3.7	5.2	6.5
Causes of Death						
Tuberculosis, 001-019	17	8	9	5.9	7.3	6.4
Syphilis, 020-029	6	3	3	2.1	1.0	1.4
Dysentery, 045-048	1		1	0.3		0.4
Diphtheria, 055					0.7	
Whooping cough, 056						0.7
Meningococcal infections, 057	2	2		0.7	1.0	0.4
Poliomyelitis, 080, 081						
Measles, 085						0.4
Malignant neoplasms, 140-205	369	262	107	127.5	133.5	132.6
Diabetes mellitus, 260	38	29	9	13.1	16.1	7.9
Pellagra, 281						0.4
Vascular lesions of central nervous system, 330-334	373	232	141	128.9	139.1	121.8
Rheumatic fever, 400-402	1		1	0.3	0.3	
Diseases of the heart, 410-443	892	625	267	308.2	301.7	295.2
Hypertension with heart disease, 440-443	105	45	60	36.3	41.2	36.9
Diseases of the arteries, 450-456	71	49	22	24.5	28.3	13.6
Influenza, 480-483	1	1		0.3	0.7	1.4
Pneumonia, all forms, 490-493	81	50	31	28.0	29.4	21.1
Bronchitis, 500-502	5	5		1.7	2.4	2.9
Appendicitis, 550-553	4	1	3	1.4		0.4
Intestinal obstruction and hernia, 560, 561, 570	11	7	4	3.8	5.9	3.2
Gastro-enteritis and colitis, under 2, 571.0, 764	6	1	5	2.1	3.1	4.7
Cirrhosis of liver, 581	15	12	3	5.2	6.6	7.9
Diseases of pregnancy and childbirth, 640-689	2		2	3.7	5.2	6.5
Congenital malformations, 750-759	29	22	7	5.5	5.5	4.1
Immaturity at birth, 774-776	31	18	13	5.8	6.4	5.5
Accidents, total, 800-962	185	133	52	63.9	61.9	71.3
Motor vehicle accidents, 810-835, 960	98	75	23	33.9	32.9	33.7
All other defined causes	366	229	137	126.4	133.9	129.0
Ill-defined and unknown causes, 780-793, 795	132	57	75	45.6	57.3	48.7

*Rates: Birth and death—per 1,000 population

Infant deaths—per 1,000 live births

Fetal deaths—per 1,000 deliveries

Maternal deaths—per 10,000 deliveries

Deaths from specified causes—per 100,000 population

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph. D., Director

January 1967

Examination for Intestinal Parasites	1,667
Examination for Malaria	2
Salmonella & Shigella (blood-feces-urine-food)	282
Examination for tubercle bacilli	4,376
Examination for gonococci	1,941
Serological test for syphilis	28,229
FTA	29
Darkfield	2
Brucella	0
General Bacteriology (cultures for isolation and confirmation)	6
Staphylococcus (cultures for isolation and confirmation)	316
Examinations for diphtheria	16
Streptococci examinations	2,623
Mycology	28
Agglutinations	8
Vincent's infection	1
Complement fixation tests	103
Test for Phenylketonuria (PKU)	6,876
Cytology	781
Water examinations	2,445
Milk and dairy products examinations	4,641
Sea food examinations	132
Examination for Negri bodies (smears & animal inoculation)	237
Virology	10
Rh Factor	675
Miscellaneous	557

TOTAL 55,983

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director
Current Morbidity Statistics

	1967		*E. E.
	Dec.	Jan.	Jan.
Tuberculosis	175	172	107
Syphilis	100	164	115
Gonorrhea	381	392	346
Chancroid	0	3	3
Typhoid fever	0	2	1
Undulant fever	0	0	0
Amebic dysentery	2	1	2
Scarlet fever & strep. throat	564	692	162
Diphtheria	2	1	1
Whooping cough	0	15	6
Meningitis	6	11	5
Tularemia	0	0	1
Tetanus	4	0	1
Poliomyelitis	0	0	0
Encephalitis	0	0	1
Smallpox	0	0	0
Measles	89	120	126
Chickenpox	55	136	155
Mumps	75	89	81
Infectious hepatitis	36	32	35
Typhus fever	1	0	0
Malaria	1	1	0
Cancer	609	393	550
Pellagra	0	0	0
Rheumatic fever	12	22	20
Rheumatic heart	38	20	37
Influenza	150	94	198
Pneumonia	276	370	312
Rabies—Human cases	1	0	0
Pos. animal heads	0	0	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

Improvement Adds New Dimension To ASCA, ISI's Weekly Current Awareness Service

A new important feature has been added to ASCA—the world's first commercially available large-scale computerized weekly information system designed specifically for individual scientists it was announced by ISI (Institute for Scientific Information) Philadelphia.

A scientist can now indicate his subject interests by telling the ASCA system what words, word stems and phrases describe his areas of interest. The ASCA (Automatic Subject Citation Alert) system then automatically sends him weekly computer printouts reporting new research of interest to him.

This ability to describe subjects by words augments the ASCA system's exciting capability of answering such questions as "what current papers have cited earlier papers," "has this man published any new works recently," "what current works cite a particular author's paper," "what current papers are being published by a given organization, either industrial, academic or governmental."

ASCA examines current journals as fast as they appear, extracts those items related to the scientist's selected interests, and mails him a personal computer printout each week. The report gives complete bibliographic data for the items retrieved. If no findings are made in a given week, the scientist still receives a report confirming the fact that a search was conducted for him.

More than 1600 significant journals in all areas of research are covered in the ASCA system. Even though this new feature has been added and additional journals are now covered, there will be no price increase. The basic rate for ASCA remains at \$100 per year.

For additional information, contact the Institute for Scientific Information, 325 Chestnut Street, Philadelphia, Pennsylvania 19106.



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...adsorbs irritants with kaolin, and protects intestinal mucosa

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.



Parepectolin®

Each fluid ounce of creamy white suspension contains:
Paregoric (equivalent).....(1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin (2½ grains) 162 mg.
Kaolin (specially purified).... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Children's Dose: One or two teaspoonfuls three times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.



The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—The Johnson administration's health legislation program this year includes proposals to expand medicare and limited medicaid, and more money is being requested for most federal activities in the health field.

President Johnson also has asked Congress for anti-air pollution legislation and stricter anti-water measures.

The President termed medicare "an unqualified success," but added "there are improvements which can be made and shortcomings which need prompt attention. He proposed that the 1.5 million disabled persons receiving other Social Security and railroad retirement benefits also be included under medicare. He said "certain types of podiatry" should be included in medicare benefits. He further directed the Secretary of Health, Education and Welfare "to undertake immediately a comprehensive study of the problems of including drugs under medicare."

Johnson noted that only 415,000, less than half of the 850,000 total of nursing home beds in the nation met federal standards and that only 3,000 of the total of 20,000 nursing homes had qualified under medicare.

To move toward correcting this situation, he wants more money for more health facilities and better health care institutions for the aged.

The President called for extension of existing legislation to improve state and local health planning for the elderly and to launch special pilot projects to bring comprehensive medical and rehabilitation services to the aged.

As for limiting medicaid (Title XIX of Social Security), Johnson said that a state should not be permitted to have its income ceilings for medical assistance more than 50 per cent higher than the level set for welfare assistance. The medicaid program, which now gives states carte blanche as to income standards, became the subject of widespread controversy after New York set an eligibility standard of \$6,000 net income for a family of four.

Twenty-eight states and jurisdictions had medicaid programs by Jan. 1, 1967, and it is estimated that 30 will have them by July 1, 1967, and 48 by July, 1968. Title XIX programs replace the medical vendor payment part of existing federal-state welfare programs, including Kerr-Mills.

The administration's fiscal 1968 budget calls for general fund expenditures of \$11.7 billion for carrying out existing and proposed new programs of the Department of Health, Education and Welfare (HEW). This is an increase of \$1.0 billion over current year spending. In addition to the general fund outlays on behalf of HEW, the budget forecasts benefit payment and administrative expenditures in 1968 from Social Security trust funds in the amount of \$31.0 billion, an increase of \$5.5 billion over 1967.

Health program highlights of the HEW budget include:

—A 5 per cent increase, to \$1.45 billion, for medical research.

	(Dollars in Millions)	
	1967	1968
—Food and Drug Administration	\$64	\$68

The \$4 million increase will be used to (1) expedite the review and surveillance of new drugs for safety and efficacy, (2) ex

and extramural research into the side effects of oral contraceptives, (3) expand the program established under last year's Drug Abuse Control Amendments, and (4) carry out the new Fair Packaging and Labelling Act. The 1968 budget will also emphasize regulation of barbiturates, amphetamines, and other drugs affecting the central nervous system, and a step-up in FDA's food standards program.

—Regional Medical Programs—\$16 million.

It is expected that grants will be awarded to regional groups in 1968 primarily to support a rapid expansion throughout the nation of operational activities begun during 1967, and an expansion and supplementation of planning activities begun in 1966. Emphasis will be on regional planning and coordination of medical resources, continuing education for doctors, and other medical personnel, and the rapid distribution of new knowledge and techniques.

—The total Children's Bureau budget request for fiscal year 1968 is almost \$246 million, an increase of about 5 per cent or about \$11 million over 1967. The largest share of the approximately \$11 million increase is \$5 million additional for, special project grants for health of school and pre-school children.

* * *

The Army and Navy will draft 2,118 medical doctors and 111 osteopaths starting in July.

The Defense Department said Selective Service was requested to provide the doctors because an insufficient number had volunteered to be able to replace men leaving service after two years' active duty. The Air Force is meeting its need and will not participate in the summer draft call.

Of the 2,229 doctors to be drafted, 1,537 will go on duty in the Army and 692 in the Navy.

Last April, the Armed Forces issued new regulations under which doctors of osteopathy who volunteered for service could be

commissioned. The Pentagon said fewer than a dozen had volunteered, however.

* * *

New clinical studies are being permitted with DMSO (dimethyl sulfoxide) under guidelines established to provide the maximum protection possible for patients receiving the drug.

Dr. James L. Goddard, Commissioner of Food and Drugs, said:

"A comprehensive evaluation of all data available to us on DMSO has been completed. Indications that the drug may be of value in treating certain conditions justify further clinical investigations."

He warned, however, that these trials must be carefully planned and controlled.

"Serious toxic signs are observed in animals used in DMSO experiments," Goddard said. "Since these effects vary considerably among different species, it is possible that the drug could be less toxic in humans. But this cannot be taken for granted."

Occurrences of eye changes in DMSO-treated animals led the Food and Drug Administration to suspend clinical trials with the drug a year ago.

Gallagher Appointed Deputy Director

Surgeon General William H. Stewart of the U. S. Public Health Service announced today the appointment of Assistant Surgeon General Joseph A. Gallagher as Deputy Director of the new Bureau of Health Manpower. Dr. Gallagher has been serving as Acting Director of the Bureau pending the entrance on duty of Dr. Leonard D. Fenninger, of the University of Rochester, whose appointment as Bureau Director was announced recently.

"Establishment of the Bureau of Health Manpower underscores recognition of the need for special consideration of manpower per se," Dr. Gallagher said, "—its use, distribution, volume, reward, quality, availability, and other factors."

Symposia On Iron Storage, Colitis, Among Scientific Programs At AMA Annual Convention

Symposia of interest to both the generalist and the specialist will be included in this year's Scientific Program of the American Medical Association's Annual Convention.

The Convention will be held in Atlantic City June 18-22, the Scientific Program in Convention Hall and surrounding hotels and the House of Delegates at the Chalfonte-Haddon Hall Hotel.

A Symposium on Absorption and Storage of Iron will be presented as a joint meeting of the Sections on Pathology and Physiology,

Internal Medicine, Experimental Medicine and Therapeutics, and Gastroenterology.

The Sections of Radiology, Proctology, Pediatrics, General Surgery, Internal Medicine, and Gastroenterology will join for a Symposium on Granulomatous Colitis and Ulcerative Colitis in Children.

Other symposia are being planned and scheduled.

The entire Scientific Program for the 1967 Annual Convention will be published in the May 8 issue of the Journal of the American Medical Association.

Medical Motion Pictures, Color TV To Again Be Features At AMA Annual Convention

Medical motion pictures and color television will be a feature of the Annual Convention of the American Medical Association again this year.

The Convention is to be held in Atlantic City June 18-22, the Scientific Program at Convention Hall and nearby hotels and the House of Delegates at the Chalfonte-Haddon Hall Hotel.

Medical motion pictures have become an integral part of the Annual Convention program. Movies are carefully screened and selected for quality, content and diversity of subject matter. Some are chosen from the AMA library of medical motion pictures

while others are picked from among films just completed. Several new films are usually shown for the first time at the Annual Convention. The total movie program is thus planned to achieve both variety and currency.

Medical motion pictures will be presented daily. At least five color television programs will be presented live, on a closed circuit from a Philadelphia hospital in cooperation with the University of Pennsylvania School of Medicine.

Several of the Scientific Sections will participate in this year's color television program.

When thiazide
or reserpine alone
won't keep

Establish and
maintain
early, more
decisive control
of blood pressure

**BLOOD
PRESSURE
SURE
DOWN**

When blood pressure won't stay down despite initial therapy—
the complaints of headache, fatigue or dizziness are often
indications—it may be time for a change to DIUTENSEN-R.

DIUTENSEN-R is thiazide and reserpine plus cryptenamine—a
rational, comprehensive therapy to help establish and maintain
earlier, more decisive control of blood pressure.

The cryptenamine in DIUTENSEN-R helps improve normal vaso-
motor reflexes while the thiazide and reserpine components
maintain vasorelaxant, sedative, and saluretic benefits. Cryp-
tenamine lowers pressoreceptor reflex thresholds (which may
be abnormally high in hypertension)—“resets” pressoreceptors
to function at more nearly normotensive levels.

Earlier, more decisive control with DIUTENSEN-R helps secure con-
sistent benefits—may reduce or even obviate the need for poorly
tolerated drugs later in therapy.

Indications: DIUTENSEN-R may be employed in all grades of essential hypertension.

Dosages: Usual dose is 1 tablet twice daily, at morning and evening meals. However, adjustment of dosage to suit individual circumstances may be required. Please refer to package insert for full particulars.

Side effects and precautions: The side effects observed with patients on DIUTENSEN-R have been of a mild and nonlimiting nature. These include occasional urinary frequency, nocturia, nasal congestion, muscle cramps, skin rash, joint pains due to gout and nausea and dizziness which have been reported for the individual components. Most of these symptoms disappear while the drug is continued at the same or lower dosage level. The concomitant use of digitalis and DIUTENSEN-R may increase the possibility of digitalis-like intoxication. If there is evidence of myocardial irritability (extrasystoles, bigeminy or AV block), dosage of DIUTENSEN-R should be reduced or discontinued. Nocturia in patients with marginal cardiac status and salt and fluid retention can be effectively controlled by limiting the time of administration to early afternoon. DIUTENSEN-R should not be used in patients with a known intolerance to reserpine. Package inserts furnish a complete summary of recommended cautions related to each of the ingredients of DIUTENSEN-R.

*As tannate salts equivalent to 130 Carotid Sinus Reflex Units.

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Physicians' Charges Under Medicare Drafted By Ball

Social Security Commissioner Robert M. Ball has revealed that proposed regulations for determining reasonable charges for physicians' services to Medicare beneficiaries have been sent for publication in the Federal Register.

The regulations include the same basic criteria for figuring reasonable charges as the guidelines issued at the start of the program to the insurance carriers who act as Medicare reimbursement intermediaries.

Ball said the regulations also contain the principles for determining reimbursement for the charges of attending physicians where the services of interns and residents are involved in rendering care in connection with medical education programs.

The official said the principles were developed after extensive discussion and consultation with the Health Insurance Benefits Advisory Council and representatives of organized medicine and medical education.

Interested parties will have 30 days from date of publication of the proposed regulations to submit their views, data, comments or suggestions before the regulations are issued in final form.

According to the Medicare law, two basic criteria for determining reasonable charges for physicians' services are (1) the customary charges for similar services generally made by the physician, and (2) the prevailing charges in the locality for similar services. In addition, the law specifies the reasonable charge cannot be higher than the charge applicable for a comparable service under comparable circumstances to the carriers' own policyholders and subscribers.

The administering carriers exercise the necessary judgments to make these determinations of the program's liability, based on their own experiences with doctors' fees, Ball pointed out. They are also expected to give

consideration to the facts in individual cases so that their determinations of reasonable charges will be realistic and equitable. But income or economic status of the beneficiary is not a factor to be considered by the carriers in determining reasonable charges.

A doctor's charge will be considered customary if it is the amount he charges patients generally for the particular service. The regulations point out that customary charges may vary from physician to physician. Thus, Ball said, Medicare relies on the charge patterns worked out for all patients in the normal course of medical practice; carriers determining reasonable charges do not negotiate or set up special fee schedules for Medicare.

To be considered a "reasonable charge" for reimbursement under the Medicare program, however, a physician's customary charge must also fall within the range of prevailing charges in a locality for the particular medical services or procedures. The range of prevailing charges may be different for physicians engaged in specialty practice than for others. The regulations provide criteria for determining prevailing charges by locality.

The program will base payment on actual charges when these are lower than the customary charge; but carriers will not include in a physician's "profile" of customary charges, token charges or those that are clearly below his customary charge in recognition of the low-income status of a patient.

Conversely, the charge recognized may be higher in an individual instance if there are special circumstances, such as medical complications or extensive travel, involving much more than the ordinary amount of a doctor's time; but such charges also do not become part of the physician's "profile."

With respect to teaching programs, a fee charged to a Medicare beneficiary by a sup-

ervising physician, who functions as the responsible attending physician, will be reimbursed as a professional service on the basis of reasonable charges, regardless of the involvement of interns and residents. For such a charge to be reimbursable, the supervising physician must provide personal and identifiable direction to the interns and residents who are participating in the care of his patient. When major surgical procedures or other dangerous or complex procedures are performed by residents, the supervising physician must be in attendance in order to be reimbursed on a charge basis as the attending physician.

Ball noted that whether or not a physician's charge is recognized under the Medicare program for services to teaching patients, the hospital can receive reimburse-

ment on a cost basis for an appropriate share of the compensation it pays its residents and interns. If the teaching program is an improved educational activity of the hospital, reimbursement will also be available on a cost basis to the hospital for an appropriate share of the compensation it pays to physicians for teaching services that are not direct professional service to a given patient.

The Commissioner pointed out that determinations of reasonable charges are made by medicare carriers and are not reviewed on a case-by-case basis by the Social Security Administration, although the general procedures and performance of functions by carriers are evaluated. The "reasonable charge" guidelines, he said, are designed to assure overall consistency and equity in the application of the provision of the law.

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Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

Traffic Safety: Action Needed Now

by

A. B. Reddick

Atlanta, Georgia

The United States is frequently called a "nation on wheels." How apt this description is!!

Today we have more than 91 million 300 thousand (91,300,000) *registered vehicles*, operated by more than 99 million (99,000,000) *licensed drivers*. We have at least one car per family, and every one of these automobiles travels, on the average, 10,000 miles per year.

Without doubt, the motor vehicle has made an *immeasurable contribution* to civilization—*culturally, socially, and economically*.

BUT . . . we've paid a toll of misery, suffering and death for these contributions.

As horrible as war is, *more casualties* occur on our highways than in wars. Since the event of the Automotive Age, about 65 years ago, more than one million 560 thousand persons (1,560,000) have been killed in traffic accidents. Compare this with the fact that in *190 years* (1775 through 1965) and 9 major wars, *total military deaths from all causes* were one million 101 thousand 144 (1,101,144).

* * *

During the year 1965 there were 49,000 deaths from motor vehicle accidents in the United States. More than one million 800 thousand (1,800,000) were injured and *disabled beyond the day of the accident*. Our accident toll from motor vehicles, work, home, public, fire and recreational activities

totaled 107,000 persons killed and 10 million 400 thousand disabling injuries.

* * *

During the year 1965 in Alabama, the final loss of \$8 billion 900 million—enough to provide each of the 3,068 counties in the continental United States with a brand new \$2 million hospital, furnish it completely with the latest equipment, and *still* have money left over!!!!

BUT . . . let's get a little closer to home with our facts . . .

During the year 1965 in Alabama, the final count of traffic deaths came to 1,098 persons. Motor vehicle accidents in rural areas accounted for more than 6,590 persons *injured beyond the day of the accident*. Unfortunately, most urban areas in the state do not report injuries or accidents to the Department of Public Safety.

People were killed in traffic accidents at the rate of more than three per day. Far too many for us to sit complacently by without doing something about it . . . *particularly* when it has been *proven conclusively* that *most of the* traffic accidents which occurred *could easily have been prevented*. Traffic safety experts tell us that if we applied the known techniques of traffic control, engineering and education, we could immediately cut our accidents by *more than 50 per cent*.

* * *

Any analysis of the problems of highway safety divides into three basic elements . . . *the road, the car, and the driver*. The first two are tangible; they submit to the slide rule and the drawing board, . . . to the planner . . . the designer . . . the engineer. The third is

Presented August 24, 1966 at FIRST ALABAMA RURAL HEALTH CONFERENCE, Montgomery, Alabama, by Mr. A. B. Reddick, Public Affairs Manager, Allstate Insurance Company, Atlanta, Georgia, and Consultant, Alabama State Safety Coordinating Committee.

intangible, for it is human, . . . because God made us what we are, it is the most complex and often the most frustrating of the three elements of the problem.

Highway engineering in America is at an advanced stage of development and still improving dynamically. We *know* how to build safety into our streets and highways and, with the impact of the Interstate Highway Program, these improvements are becoming a reality. Unfortunately, these same life-saving engineering techniques are not being used to full advantage in the construction of new State and County roads or in the rebuilding of older roads.

The inclusion of safety features in motor vehicles has had a stormy history, particularly in the past six months. In all probability, new safety features required under the National Traffic Safety Act will be included in automobiles in the coming years. BUT . . . these new safety additions can only have the effect of reducing the damage caused by a collision. As yet, there are no practical engineering devices that will prevent collisions. The motor vehicle is a machine, and whatever its capacities, it will do only what the human being who drives it tells it to do.

In our grappling with highway safety problems, one of the most glaring omissions has been the *lack of long-range planning*; of *setting ultimate objectives*. Highway engineers plan and build with an eye fifteen to twenty years hence; so do automobile manufacturers. Safety efforts, historically, are always lagging behind, always trying to catch up with the problems created by miles of new roads and millions more cars on them.

If almost 50,000 people die each year, and hundreds of thousands are maimed, and millions of dollars wasted—despite today's efforts and perhaps because of today's deficiencies—can your mind conjure what tomorrow will be like? Thousands of miles will have been added to what is already the world's greatest road network, and more than one hundred million (100,000,000) vehicles will be using it. *Can you imagine the carnage if*

we stand still? Can we afford to merely catch up with today? Do we dare not plan and provide for tomorrow, so soon upon us?

* * *

In this most difficult area of highway safety—the human factor—there are two important tools on which I would like to comment. If both of these tools were in operation to their fullest extent, I sincerely believe our traffic safety record would be improved immediately.

The first of these tools is high school Driver Education for every boy and girl in Alabama prior to receiving their drivers license.

High school driver education has proven its worth many times over. It not only teaches our young people how to drive a car, but why a car should be driven safely. The place to start our accident improvement program is with our beginning drivers. And nowhere can beginning drivers be taught the vital skills and responsibilities as effectively as in the atmosphere of our schools. Driver Education is as necessary a part of the curriculum as any academic subject. Learning to live sensibly and successfully with the automobile is and should be an integral part of the formal education of our youth.

In 1965, an estimated three million teenagers entered the driving population of the United States. These *new, inexperienced* drivers make up about 9.8 per cent of the total U. S. driving population. They were involved in 15.5 per cent of the FATAL ACCIDENTS and 16.5 per cent of ALL ACCIDENTS recorded.

If these rates continue, by the time the new teen-age drivers reach their 25th birthdays, they will have been involved in about 15,000 fatal accidents; more than 500,000 injury accidents; about five million property damage accidents; and will have rung up an accident bill of almost \$2½ billion.

The above totals are not unique to last year's new drivers. They will be repeated for the *new* drivers in *every* year ahead un-

less the driving experience of new drivers can be improved.

For years, Alabama has been on the *bottom* of the list of states providing driver education for its youth. We have averaged more than 60,000 students each year for the past several years who *were eligible* to take driver education, but *were unable* to do so because of lack of available courses in their schools. In the school year 1964-65, only *three per cent* of our approximately 500 high schools offered a complete course in driver education; and only *one per cent* of the more than 61,000 eligible students were able to take the course.

Fortunately, even though it is slow and late, we are beginning to move toward providing driver education for future students. Delegates to the Governor's Traffic Safety Conference held in April, 1964, *strongly* recommended legislative action to provide funds for the local school systems to assist them in activating driver education. In August, 1964, House Bill 84 was signed into law by Governor Wallace to provide funds for driver education from a one dollar penalty assessment on all moving traffic violation fines. In the summer of 1965, the University of Alabama conducted a driver education instructors' course; the *first* held in the state in more than ten years. In the school year 1965-66, more than 30 high schools offered the course. This summer, four Alabama colleges and universities had training programs for teachers to become certified instructors with more than 70 persons taking the courses. It is hoped that close to a hundred schools will offer the course in 1966-67.

This is real progress compared with the eight or ten years prior to 1964. However, more money *must* be provided for driver education if this progress is to be accelerated so that all students can be trained prior to receiving their drivers license.

In 1963, Act No. 7 was passed to establish the Alabama State Safety Coordinating Committee. This committee, composed of the

heads of the various departments concerned with highways, the courts, health and safety and with the Governor as Chairman, has been meeting monthly to plan, develop and activate programs in the area of traffic safety improvements. It is under the auspices of the Coordinating Committee that three Governor's Safety Conferences have been held, teacher driver education scholarships have been secured, and a number of other projects have been conducted. I might mention also that Dr. Paul Nickerson, Chairman of your Rural Health Council is on the Advisory Committee and has contributed much to the success of the Coordinating Committee's accomplishments.

One additional comment about high school driver education. . . . This life-saving course *will never* be available to all Alabama students of eligible age *unless* legislative action is taken to provide additional funds for the local school systems. The cost is nominal, compared with the returns in lives saved, economic loss prevented and reduction in insurance costs for these young drivers. Thirty states now provide special funds for driver education, and each of these states has had a tremendous increase in the number of eligible students completing the course. In 18 of these states, the completion of an approved course is recognized in setting the minimum age of eligibility for the regular driver's license.

* * *

The *second* tool to assist in controlling the human factor in traffic safety is the driver's license.

Good administration of a modern driver's licensing law partakes of both education and enforcement. Its issuance and revocation can be effective means of educating the driver, BUT they can be used for enforcement as well. Its suspension or revocation is usually the ultimate enforcement weapon, but the process can be highly educational, too.

If the driver's license is important to us today, it will be much more so tomorrow

with the millions of teen-agers and senior citizens on our highways. If we can decide upon ultimate standards for its issuance and withdrawal, and how to reach those standards, we will find them most useful today, and an absolute necessity for tomorrow.

Our ultimate standards, I suggest, should be these:

1. Completion of a high school driver education course, or comparable training, as a pre-requisite to issuance of the initial license.
2. A thorough, objective initial driver's license examination, administered by a trained and competent examiner.
3. A complete, periodic re-examination of all drivers at varying time intervals, dependent on age of the individual.

4. An extensive driver improvement program, employing both suspension and revocation of the license, and including a constant review of violations and accident records, and

5. A strong enforcement program aimed at those driving while their license is under suspension or revocation.

A proper initial driver's license examination should cover three areas: (1) the applicant's physical condition; (2) his knowledge of traffic laws and highway signs, signals and markings; and (3) his actual driving ability.

The laws test should be clear and objective. This is probably the area where the least effort is needed to reach our ultimate goal.

The physical portion of the examination should be an advanced form of eye and co-



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...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity¹ or side effects^{2,3} and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. 38:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. 20:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311 (Feb.) 1953.



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ordination test, covering such points as side vision, reaction time and glare recovery. The applicant should be required to furnish a physician's certificate covering those conditions, which, at the current stage of medical knowledge, are known to have an effect on driving ability.

The test of driving ability should encompass as many driving situations as possible, including parking. These tests should be given on a well planned road test course specifically constructed for this purpose.

Periodic re-examination should consist of at least the physical and laws portion of the initial licensing examination. Logic tells us that different human beings deteriorate physically at different ages, particularly as to vision, hearing and reaction time. Logic also tells us that knowledge of traffic laws deteriorates as well—and laws change, too.

"Driver Improvement" has become something of a technical term, applied to all uses of the power to suspend and revoke drivers' license. Proper use of the suspension power should be not simply punitive, but have as additional purposes education and rehabilitation. Experience has shown that, while the imposing of fines may have lost its effect on a driver, the sudden confrontation with even the possibility of losing his license for a period of time is all that is needed to bring a change in poor driving habits or disrespect for traffic laws.

Essential to any good driver improvement operation is complete, fast and accurate reporting to the licensing authority of all moving traffic violation convictions. Without this, people can justly object that they are being treated unfairly if they simply happen to achieve their convictions in courts that do report to the state, while others with at least as many or more convictions through courts that do not report have immunity.

These ultimate driver's licensing standards are a tall order. I do not suggest that they are immutable, but they do represent the best thinking in this field based on years of experience.

Putting to use these two tools—universal high school driver education and a modern driver's licensing procedure—is not easy because there are problems, both politically and financially, to be solved.

No state that I know of has excess revenue to throw around. What expenditure is involved; however, becomes less as you consider the tremendous sums of money that are literally wasted in this state because of traffic accidents.

Perhaps it would be appropriate at this time to remind you that our 1965 traffic toll cost the citizens of Alabama more than \$197 million 640 thousand (\$197,640,000).

I can't comprehend such huge sums, so look at it this way: That's enough money to put driver education in the 550 high schools in Alabama and pay \$50 for each student trained for the next 20 years; pay for 500 more state patrolmen at \$10,000 each for the next 20 years; and still have plenty left over to finance the modernization of our driver's licensing procedures and operations.

A last word—the greatest deterrent to good traffic safety in our state is APATHY! We see, read or hear the news regarding our traffic accident and injury problems, but we do nothing!

Until each person accepts as a part of his responsibility for traffic safety to drive prepared at all times for emergencies—and is willing to let his elected officials, local and state, know he favors good traffic programs such as enforcement, driver improvement and high school driver education—we will continue to see the accident toll in Alabama climb ever higher.

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In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of

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Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

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(See next page for prescribing information.)

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Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone. **Contraindications:** Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to

be definitely related to use of the drug, laboratory findings characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive coagulability and thymol turbidity tests, elevated serum gamma-glutamyl transaminase levels, peripheral eosinophilia, and a normal cholecystogram.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given 2 Gm. of the drug daily for periods of two to six months. Patients with rheumatic fever have taken prophylactic 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who received 250 mg. of Ilosone daily for an average of sixteen months in the treatment of rheumatic fever prophylaxis. The results were comparable to those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevations of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxic side-effects, were reported in 102 pediatric patients who received short-term (1 to 14 day) courses of Ilosone in the treatment of streptococcal infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a side-effect of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally in the following forms: Ilosone Pulvules®, Ilosone Chewable Tablets, Ilosone Drops, Ilosone, 125, for Oral Suspension.

For infants and for children under twenty-five pounds body weight, the usual dosage is 5 mg. per pound every six hours. For children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended during the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days is recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: *Am. J. M. Sc.*, 247, 1947. 2. Griffith, R. S., and Black, H. R.: *Antibiotics & Chemother.*, 12:3, 1958. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: *Am. J. M. Sc.*, 239:191, 1960.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Scientific Data Lacking On Cancer "Vaccine"

Two Cleveland medical leaders say in the current (January 30) Journal of the American Medical Association that administration of a so-called cancer "vaccine" to humans is completely unwarranted until scientific tests prove the safety and effectiveness of the product.

So far, there are no scientific data to justify experimentation on humans with a "vaccine" developed by the Rand Corporation of Cleveland, say Austin S. Weisberger, M. D., president of the Cleveland Academy of Medicine, and David Fishman M. D., chairman of the Department of Medicine of Western Reserve University.

Their report on the vaccine, the publicity it has received, and an investigation of the product by a committee of the Cleveland Academy of Medicine, appear in the Question and Answer section of the Journal.

Their report is in answer to a question by a Barron, Wis., physician regarding the usefulness of the product, one of several similar ones received by the Journal in recent months.

An editor's note after the answer announces that directors of the Cleveland Academy of Medicine have declared it unethical for any Academy member to use the Rand vaccine for new patients. This policy, effective Jan. 10, 1967, will stand "until investigative and research data are available warranting such human experimentation," the Academy said.

Publicity about the so-called vaccine a few months ago caused the Cleveland Academy of Medicine to invite officials of the Rand Corporation to "provide . . . more factual information."

Said Drs. Weisberger and Fishman: "The following points were elicited: (1) There

have been no experiments with animal tumors to test the efficacy of the 'vaccine.' There have been no presentations at scientific assemblies, no publications, and no critical review or evaluation of data.

"In fact, it has not even been established that the Rand Corporation has, at this time, essential data establishing the specificity of the tumor antigens being employed, the production of specific antibodies against the tumor antigens, and the lack of cross-reaction with normal tissue antigens.

"(2) Experiments for toxic or other side effects have been performed on one horse, 12 rabbits, and 40 mice for a 'minimum of three injections.'

"(3) The human experiments being performed cannot be expected to demonstrate the efficacy of the 'vaccine.' No controls or double-blind (statistical) studies are being employed. The material is being released to any licensed physician and osteopath requesting supplies of the 'vaccine' in accordance with Ohio law. However, this is being done without regard for the clinician's experience in clinical investigation and without regard to proposed methods of determining the effect of the vaccine. The best one can expect from such an experiment is a series of uncritical anecdotal accounts without scientific value."

Because scientific data are lacking, "it is the opinion of the Special Committee (of the Cleveland Academy of Medicine) that use of the Rand 'vaccine' in human beings is completely unwarranted," said Dr. Weisberger in a letter to a Cleveland newspaper. "Unfortunately, publicity which encourages the use of the 'vaccine' continues to appear, and the use of this agent in the community is increasing," he said.

Conference On Narcotics Studies Liaison Of Medicine, Law

Medicine and the law moved toward closer understanding and liaison in dealing with narcotics addicts at a national conference in New York City.

More than 100 physicians, law enforcement authorities and others concerned with the problem of addiction from throughout the nation gathered for a two-day workshop (Jan. 16-17) to discuss how to improve the control of narcotics and the management of narcotic-dependent persons (addicts).

Participants in the conference agreed that it is important that state and local bodies be created to strengthen liaison with law enforcement authorities to help resolve questions of control and management.

Some highlights that emerged from the group discussions of the workshop:

—There may be a tendency on the part of some medical practitioners to avoid prescribing narcotics to their patients when indicated, rather than to become involved in the complexities of control. In some instances overlapping federal, state and local laws and regulations and problems of confidential relations between patient and physician make difficult the exchange of information necessary to define the extent of narcotic drug dependence and the need for treatment and rehabilitation resources and activities. Important progress was made at the conference on the solution of such problems.

—It was recommended that medical advisory and liaison committees be established at the state and county levels that could serve as a source of guidance to the individual practitioner, to the law enforcement agencies and to the general public.

—Better training of medical students, interns and residents in treatment of narcotic dependent persons was recommended. Few physicians ever see such patients during their training.

—The American Medical Association and

the National Academy of Sciences—National Research Council have established guidelines relative to the appropriate and ethical use of narcotics and the treatment of drug dependent persons. These guidelines are utilized by the Federal Bureau of Narcotics in establishing relevant Bureau policies. Collaboration between national law enforcement agencies and organized medicine is quite good, but national cooperation is several steps ahead of that in several states and in many localities, pointing up the need for establishment of state and local liaison mechanisms.

The conference was called by the American Medical Association, with the joint sponsorship of the Medical Society of the State of New York and the County Medical Societies of New York City. Presiding were Lindsay E. Beaton, M. D., of Tucson, Ariz., Chairman of the AMA Council on Mental Health, and Dale C. Cameron, M. D., Chairman of the AMA Committee on Alcoholism and Addiction. Dr. Cameron, Superintendent of St. Elizabeth's Hospital, Washington, D. C., also is Chairman of the Committee on Problems of Drug Dependence of the National Academy of Sciences—National Research Council.

In attendance were national and selected state representatives of the medical profession, medical and pharmacy boards of licensure, federal and state law enforcement agencies, jurists, legislators, sociologists, psychologists and the clergy.

"Narcotic addition is a sociological and medical problem. It also is a legal problem. Through the American Medical Association, the medical profession has long recognized the need for cooperation with law enforcement," said Henry L. Giordano, Commissioner of Narcotics of the Bureau of Narcotics of the Treasury Department, and the federal government's chief narcotics law enforcement officer.

"The increasing interest of the medical profession in exploring medical solutions to the addiction problem is heartening. Narcotic addiction has received much long-awaited attention in the last several years. The addict is definitely in the picture these days," Mr. Giordano said.

Mr. Giordano outlined the provisions of the new federal Narcotic Addict Rehabilitation Act of 1966, to become effective next month. In so doing he pointed out that "it helps to attack the roots of addiction by applying more flexible tools of medicine and psychiatry, rehabilitation and aftercare supervision so that the addicts may return to society as useful members."

Anthony A. Lapham, Executive Assistant to David C. Acheson, Special Assistant for Enforcement to the Secretary of the Treasury, urged that organized medicine form committees on a regional or state basis to work with federal and state enforcement officials in dealing with addiction.

"An important step in the right direction," said Mr. Lapham, "was taken when members of the Committee on Alcoholism and Addiction of the AMA Council on Mental Health and members of the Committee on Problems of Drug Dependence of the National Academy of Sciences—National Research Council agreed to act jointly in an advisory capacity to the Commissioner of Narcotics," Mr. Lapham said. "It would be very helpful as a second step if medical bodies could be organized on a regional or state basis," he said.

Jerome H. Jaffe, M. D., University of Chicago psychiatrist, in discussing developments in treatment of addicts, pointed out that "A comprehensive treatment should attempt to help the opiate-dependent individual become a mature, stable, responsible, productive and non-drug-dependent member of his own community."

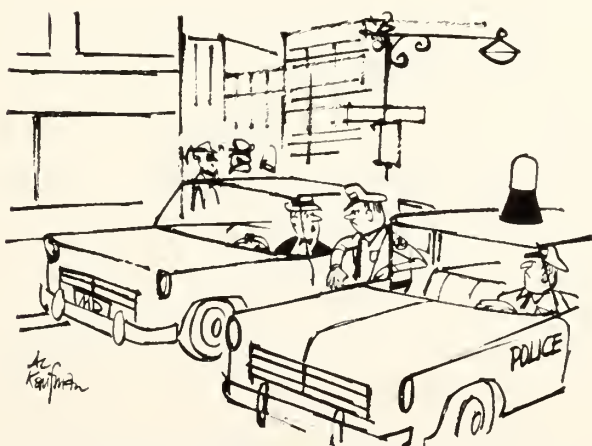
"It is apparent," said Dr. Jaffe, "that a growing segment of both the medical and legal professions are refusing to be bound either to old stereotypes of 'the addict' or to

outmoded treatment models. We must develop skills to select the right treatment for each patient."

Lawrence C. Kolb, M. D., Director of the New York State Psychiatric Institute, pointed out that the physician sometimes faces a difficult problem in long-term treatment of an addict. The physician must establish a strong emotional bond with the patient to gain his confidence and thus carry out effective therapy. To do this, it sometimes is necessary for the physician to prescribe drugs to maintain addiction for a period of time while he is gaining the confidence of the patient, in order that effective therapy can be carried out.

Dr. Kolb pointed out that local liaison committees of physicians and law enforcement authorities are needed to counsel with the physician in practice to help him make proper decisions in such instances.

Particular attention was paid to the importance of developing improved programs in the five states having the greatest drug dependence problem. These are Illinois, New York, California, Michigan and the District of Columbia. Representatives of these states met toward the end of the conference to study ways and means of improving programs and liaison in their respective states.



"I have a hard time stopping for red lights . . . it all goes back to my intern days on ambulance duty."

Reprinted from *The New Physician*

Glaucoma Increasingly Serious Disease

Glaucoma is an increasingly serious eye disease which occurs most frequently in persons over the age of 30 and affects at least 2 per cent of people over 40.

A recent article in the Journal of the American Medical Association points out that there are 54,000 men and women blind from glaucoma and that an additional 185,000 people are blind in one eye from this disease. In the United States, says the JAMA article, there are about 1.2 million people with undiagnosed glaucoma and this disease is responsible for 3,500 new cases of blindness each year.

One type of glaucoma, called chronic glaucoma, causes no symptoms until severe damage has been done, says Today's Health Guide, the manual of health information for the American family. Chronic glaucoma can be detected only by the medical eye physician (ophthalmologist) who uses an instrument to measure the degree of pressure in the eye and another instrument to measure the

size of the visual field, or side vision. Every adult over 40 should have a test for eye pressure as well as a test for visual fields when he goes for an eyeglass check.

The second type of glaucoma which affects people over 40 is called acute glaucoma. In this ailment the pressure suddenly rises to a very high level and the attack is accompanied by severe pain, redness and markedly blurred vision. Most often the patient must be placed in a hospital immediately and undergo surgery to relieve the pressure. This is successful in most cases, but prompt treatment is very necessary.

The major problem physicians face in dealing with glaucoma is to detect the disease early enough to begin treatment before serious eye damage is done. Many of the people who have glaucoma don't know it.

It is highly important for persons past 40 to have an annual medical checkup for their eyes, even if they don't wear glasses and have no apparent visual problems.



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ALABAMA MEDICAL POLITICAL ACTION COMMITTEE
POST OFFICE BOX 51
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March 10, 1967

CHAIRMAN
E. B. GLENN, M. D.
1023 S. 20TH STREET
BIRMINGHAM, ALABAMA

SECRETARY-TREASURER
GROVER C. MURCHISON, JR., M. D.
1100 E. FAIRVIEW AVENUE
MONTGOMERY, ALABAMA

Dear Doctor:

I read something recently which I would like to share with you. It is a quotation attributed to Alexander Woollcott, and it goes like this:

"Many of us spend half our time wishing for things we could have if we didn't spend half of our time wishing."

Read it again. I think you will agree with me that it makes sense.

And what, you might ask, has this got to do with ALAPAC? I think it has a lot to do with it.

I know many physicians who spend a great deal of time bemoaning what is being done to the practice of medicine by politicians in Washington and in Montgomery. They are constantly wishing something could be done about it.

If those same physicians would take the time they spend berating the politicians and use that time in doing something about it, then those wishes might well come true.

That is the reason for the very existence of ALAPAC---to get physicians out of the grandstand, where they do little but criticize the coach and the quarterback, and get them down on the field where the game is being played.

ALAPAC couldn't care less whether a candidate is a Democrat, Republican, Whig, or No-Nothing. It is interested only in the election of candidates who share with us a concern about the health needs of the people of Alabama.

Early returns on 1967 membership are most encouraging. I hope you will make it even more so. And remember, the \$35 voluntary contribution includes membership for your wife as well. We need her too.

Sincerely,

E. B. Glenn, M.D.
Chairman, ALAPAC

INDEX TO ADVERTISERS

Abbott Laboratories	1064, 1065, 1066	Wm. S. Merrell & Company	1098, 1099
Ames Company	1113	Neisler Laboratories	1143
Ayerst Laboratories	1102, 1103	Parke, Davis & Company, Inc.	2nd Cover
Appalachian Hall	1145	Parkwood Hospital	1133
Bristol Laboratories	1021, 1136, 1137	Peachtree Hospital	1158
Burroughs-Wellcome	1092	Philips Roxanne Laboratories	1030, 1031
Ciba	1039	Pitman-Moore	1070, 1071
Dorsey Laboratories	1028	Wm. P. Poythress & Company	1023
DuPont	1085, 1086, 1087	Riker Laboratories	1033
Durr Surgical Supply Company	1115	A. H. Robins	1037, 1117, 1118, 1151
Geigy Pharmaceuticals	1017, 1024, 1025, 1040, 1041	Roche Laboratories	1090, 1091, 4th Cover
Highland Hospital	1160	J. B. Roerig & Company	1050, 1051
Hill Crest Hospital	1016	Wm. H. Rorer, Inc.	1128, 1129, 1139, 1149
Hynson, Westcott & Dunning, Inc.	1011	Searle	1088, 1089
Lederle Laboratories	1035, 1038, 1042, 3rd Cover	The Stuart Company	1014
Eli Lilly & Company	1st Cover, 1018, 1019, 1020, 1058, 1059, 1076, 1152, 1153, 1154	Syntex Laboratories	1044, 1045, 1046, 1047, 1120, 1121
		Winthrop Laboratories	1013
		Wyeth Laboratories	1126, 1127

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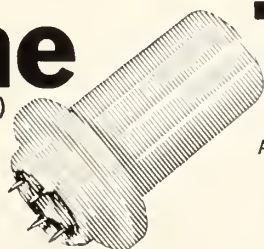
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Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Warn against hazardous occupations requiring complete mental alertness. Use caution in administering to addiction-prone patients or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of child-bearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In elderly and debilitated and in children over five, limit dosage to smallest effective amount, increasing gradually as needed and tolerated. In general, concomitant use with other psychotropics is not recommended. Paradoxical reactions have been reported in psychiatric patients and hyperactive aggressive children. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Observe usual precautions in presence of impaired renal or hepatic function, impending depression and suicidal tendencies.

Adverse reactions: Drowsiness, ataxia and confusion may occur, especially in elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. Syncope occurs rarely. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis, jaundice and hepatic dysfunction) may develop occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy. Individual maintenance dosages should be determined.

Dosage: Oral—Adults: Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d.

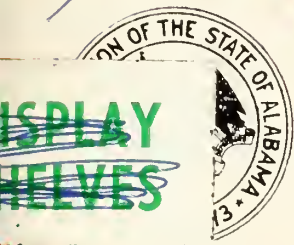
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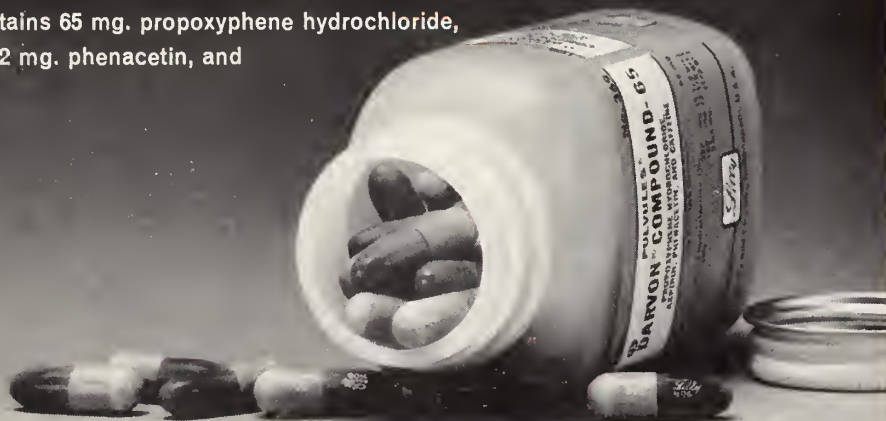


IN THIS ISSUE

- Use of Colon for Esophageal Replacement . . 1211*
*The Dynamics of Counseling
in Medical Practice 1215*
*Congenital Anomalies
in the Newborn Period 1229*
Program of the 106th Annual Session . . . 1237

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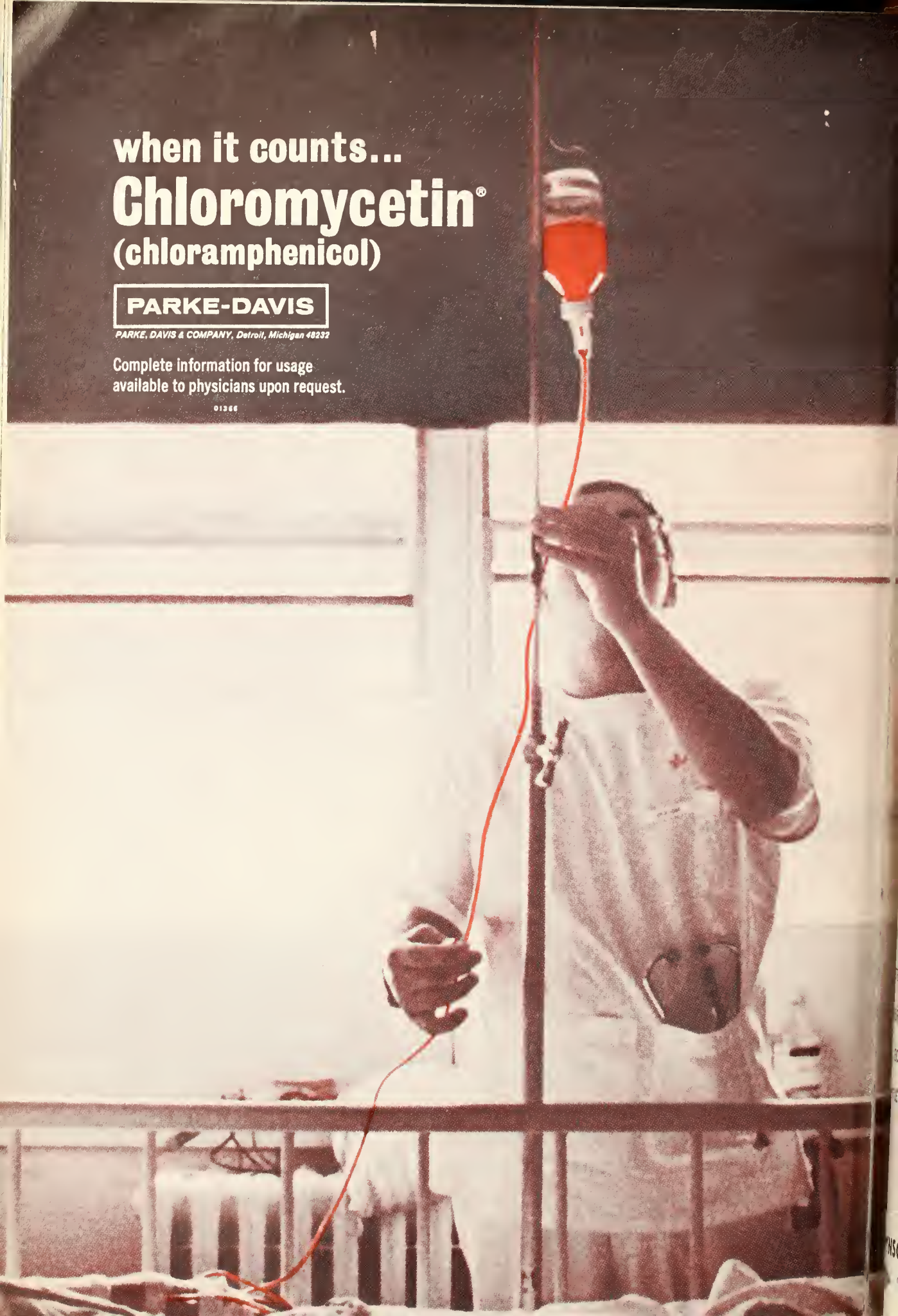
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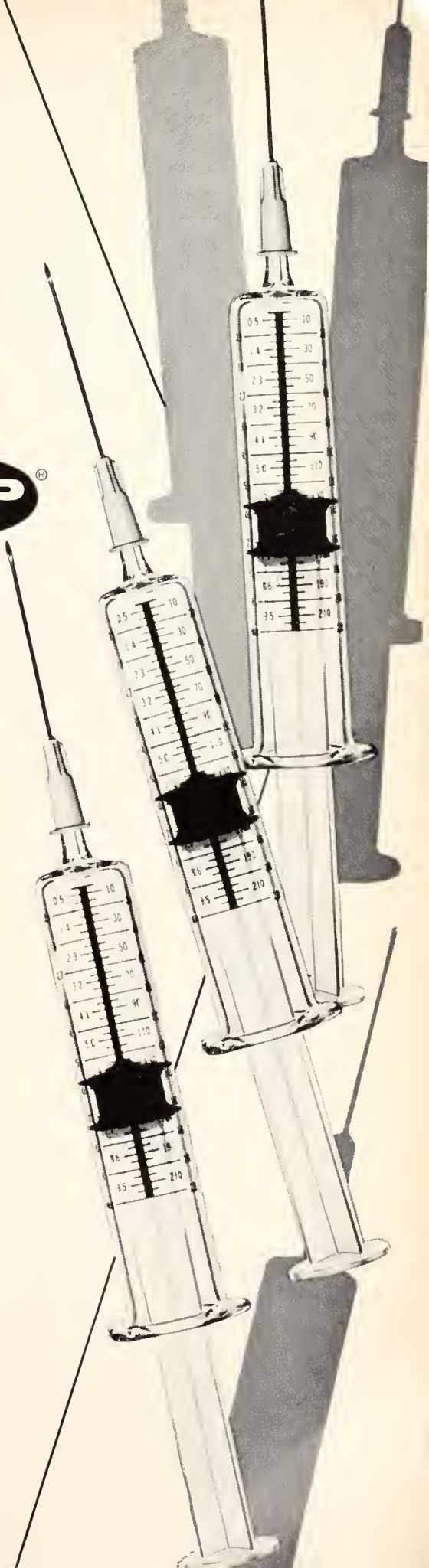
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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 36 • April, 1967 • No. 10

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price \$5.00 Per Year
\$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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L. P. Patterson Montgomery

Assistant Managing Editor

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CONTENTS

President's Page	1163
The Woman's Auxiliary	1170
Editorial Comment	1177
The Gavel Passes	1177
Medicare or "Redicare"?	1180
LBJ's Word Game	1180
Physician Placement Service in Alabama	1194
Around the State	
1967 Officers of County Medical Societies	1196
Vital Statistics	1197
Scientific Section	1211
Use of Colon for Esophageal Replacement, Robert Lawrence Cruik, M. D., Gadsden	1211
The Dynamics of Counseling in Medical Practice, C. Roy Woodruff, Th. D., Tuscaloosa	1215
Maternal and Child Health	1229
Congenital Anomalies in the Newborn Period, Hugh B. Lynn, M. D., Rochester, Minnesota	1229
Program of the 106th Annual Session	1237
Alabama Department of Public Health	1246
"Environmental Pollution Problems in Alabama—Water and Air," Ira L. Myers, M. D., Montgomery	1246
The Month in Washington	1260
AMA Evaluates Oral Contraceptives	1263
Physician Responsibility in Preventing Suicide	1268
Europe's Young Physicians Seek Opportunities in U. S.	1274
Liquid Meal Called Digestive Aid	1283



Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?
 in any case,
 usually gram-negative*

Therapy:

two 500 mg. Caplets® q.i.d.
 (initial adult dose)

ns: Urinary tract infections caused by gram-negative and some gram-organisms.

cts: Mainly mild, transient gastrointestinal disturbances; in al instances, drowsiness, fatigue, pruritus, rash, urticaria, mild lilia, reversible subjective visual disturbances (overbrightness of ange in visual color perception, difficulty in focusing, decrease in ity and double vision), and reversible photosensitivity reactions. overdosage, coupled with certain predisposing factors, has produced ulsions in a few patients.

ns: As with all new drugs, blood and liver function tests are advis- ing prolonged treatment. Pending further experience, like most therapeutic agents, this drug should not be given in the first trimester ncy. It must be used cautiously in patients with liver disease or impairment of kidney function. Because photosensitivity reactions have een a small number of cases, patients should be cautioned to avoid ery exposure to direct sunlight while receiving NegGram, and if a n occurs, therapy should be discontinued. The dosage recommended d and children should not arbitrarily be doubled unless under the supervision of a physician. Bacterial resistance may develop.

esg the urine for glucose in patients receiving NegGram, Clinistix® nt strips or Tes-Tape® should be used since other reagents give a osive reaction.

e: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times rone to two weeks. Thereafter, if prolonged treatment is indicated, sa may be reduced to two Gm. daily. Children may be given mely 25 mg. per pound of body weight per day, administered in oes. The dosage recommended above for adults and children rbitrarily be doubled unless under the careful supervision of a ar. Until further experience is gained, infants under 1 month nse treated with the drug.

up: d: Buff-colored, scored Caplets® of 500 mg. for adults, conve- y available in bottles of 56 (sufficient for one full week of therapy) and in of 00. 250 mg. for children, available in bottles of 56 and 1000.

nc: (1) Based on 23 clinical papers, 1512 cases. Bibliography on st. (Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: icrobial Agents and Chemotherapy—1964, Ann Arbor, American y Microbiology, 1965, p. 722.

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eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
- "Excellent" or "good" response reported in *more than 2 out of 3 patients* with either chronic or acute gram-negative infections.¹

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: E. coli, Klebsiella, Aerobacter, Proteus, Paracolon or Pseudomonas²... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

President's Page

Viewpoint: April, 1967

Twelve issues ago on the President's Page, I asked for your support in carrying on the affairs of the Association. In this, my last contribution to the Page, I wish to thank you for your magnificent co-operation and request you to extend the same to my successor, Dr. E. Bryce Robinson, Jr.

On reflection, certain events of the past year come to mind:

Our first called press conference was held in Birmingham on July 8 for the purpose of acquainting the people of the state with our position on implementation of Title XVIII of Public Law 89-97. This was accomplished without an adverse comment from any of the news media represented.

The precipitous resignation of our former Executive Secretary created consternation of brief duration. Mr. L. P. Patterson, then the Assistant Executive Secretary, assumed responsibilities smoothly and soon immeasurably strengthened our Central Office, and through it our Association by encouraging Mr. Robert Ingram and more recently Mr. John Arnold to come with us. As a result we are completing the year with the most competent staff in our history: Mr. Patterson, Administration; Mr. Ingram, Legislation; and Mr. Arnold, Public Relations and Publications.

In this period of confrontation with increasingly more complex problems a superior staff, with wide knowledge and expertise in the areas of concern, is not a luxury but a compelling necessity.

The called meeting held in Montgomery on November 6, 1966 evidenced the effec-



Dr. J. O. Finney

tive manner in which our organization can function when the chips are down. Attendance was excellent, interest manifest and the issues settled by decisive vote. Our position on Title XIX of Public Law 89-97 was unanimously adopted; the need for increase in dues was approved without a dissenting vote, and the meeting adjourned with a sense of cohesiveness which must characterize our actions in the years to come.

The planning grant for our proposed Regional Medical Programs was approved some two months ago. The Alabama concept of RMP is unique in that it envisions the establishment in community hospitals

PRESIDENT'S PAGE

units to provide therein the most recent advances with the least possible delay.

Enough for the past. The future is the matter of real concern. Title XVIII is operative. Title XIX will be implemented in Alabama in time.

Our interests are not provided for by Federal decree in Title XIX as is the case in Title XVIII. We must see to it that the Alabama Legislative Act implementing Title XIX assures us of the following: Free choice of physician and facility, the usual and customary fee, free choice of drugs and devices and no requirement for prior authorization for service. After all it is anticipated that 40 per cent of our state population will be covered by the umbrella of Title XIX.

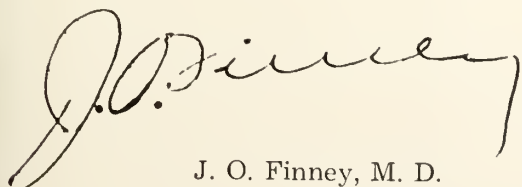
Alas! Titles XVIII and XIX are not the end. The Office of Educational Opportunity and the Appalachia health programs are springing up in our state without consultation with the State Association or its Board of Censors.

I trust you share with me a deep concern in this matter of Federal encroachment, now on the borders of the private practice of medicine. Federal medicine is here and we must learn to live with it in such a manner that utter socialization of our profession will be averted.

Please keep yourself informed on vital issues by reading the weekly Alabama MD and the articles in the Journal devoted to developments in the socio-economic area.

May I thank you for the privilege of serving you and declare to my successor best wishes for accomplishments of high order in his administration.

Sincerely yours,



J. O. Finney, M. D.
President



One by one the family's downed Because the G.I. bug's around

Parepectolin for quick relief of acute diarrhea
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Contains opium ($\frac{1}{4}$ grain) 15 mg. per fluid ounce.

warning: may be habit forming

Pectin ($2\frac{1}{2}$ grains) 162 mg.
Kaolin (specially purified) (85 grains) 5.5 Gm.
(alcohol 0.69%)

Usual Adult Dose: One or two tablespoonfuls three times daily.

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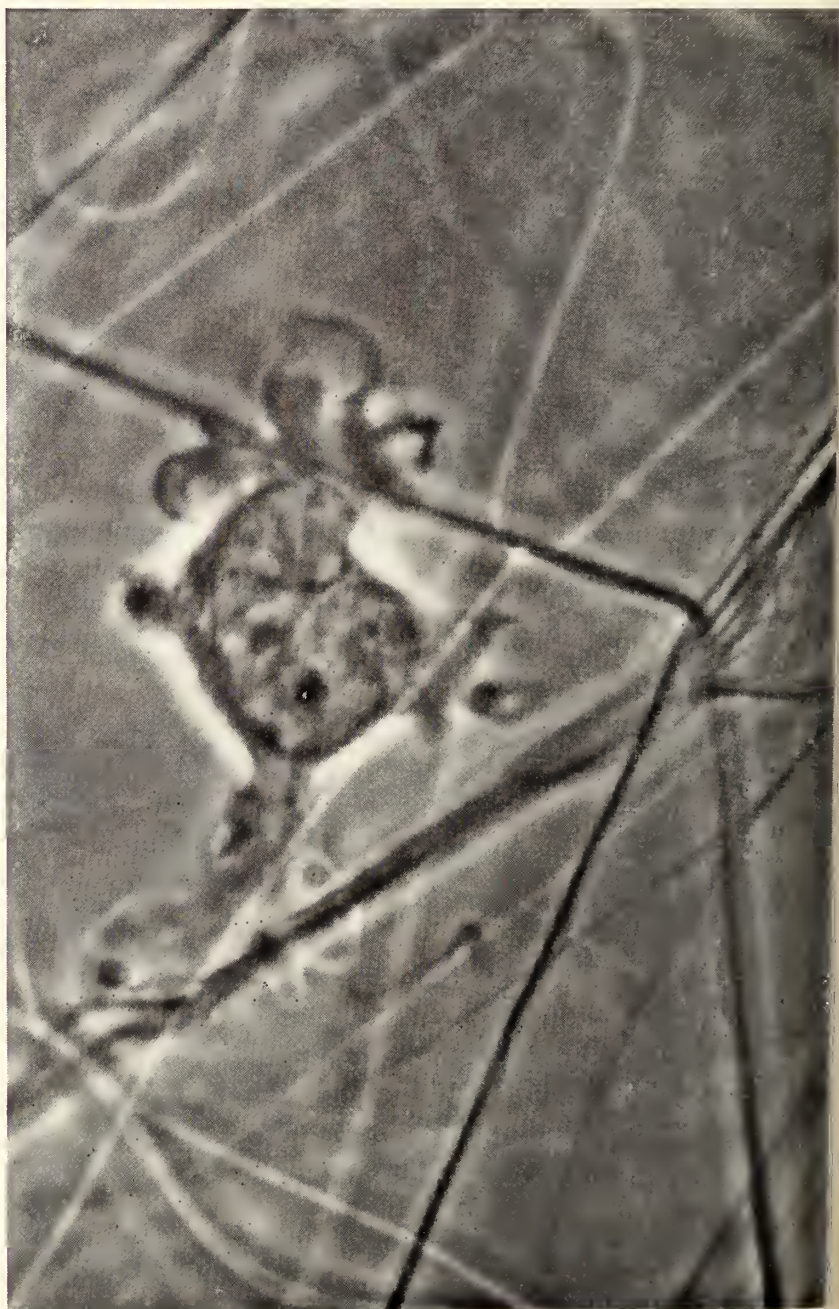
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INFLAMMATION: A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

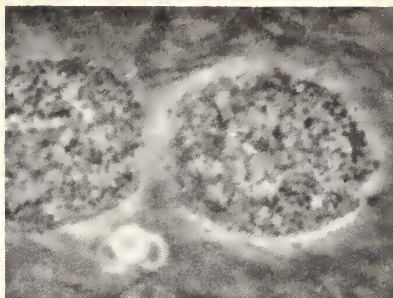


Visual evidence of how corticosteroids influence the inflammatory reaction

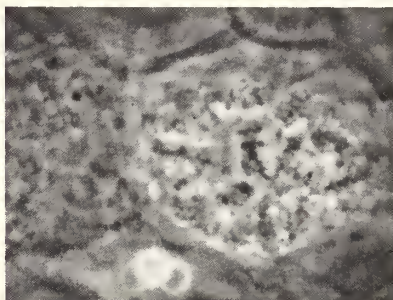
Working with phase-contrast cinematography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and epithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



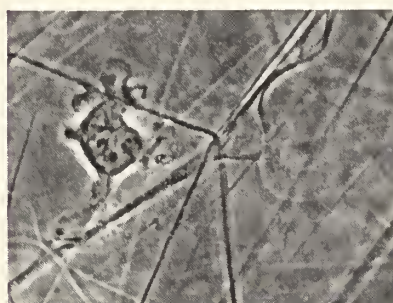
Phase-contrast microscopy showing mast cell before injury.



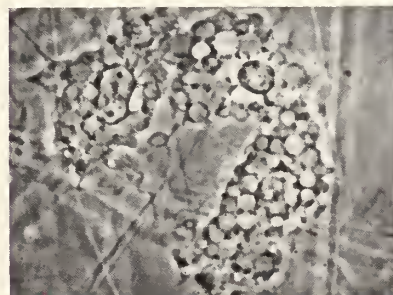
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

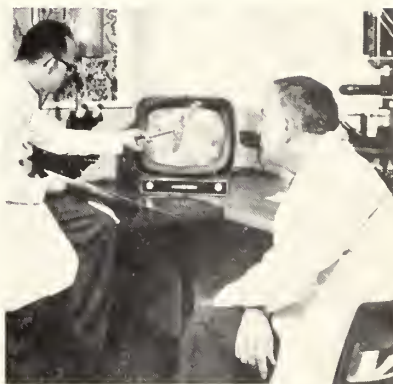
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid—Synalar (fluocinolone acetonide)—the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.

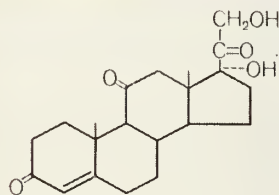


In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

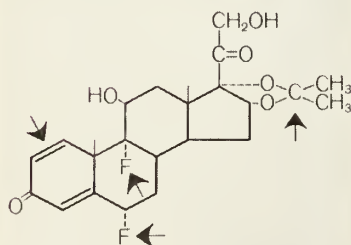
*A New View of Corticosteroid Action in Inflammatory Dermatoses, a film based on this study, is now available from your Syntex representative.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more corticosteroid. And it can often do it more effectively.



Hydrocortisone



Fluocinolone Acetonide (Synalar)

- a double bond between carbons 1 and 2
- fluorine substitutions at both the 6- α , and the 9- α positions
- the addition of the acetonide at the 16- α , 17- α positions, thus providing one of the most potent topical corticosteroids available.

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY¹⁻⁴ is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B— injected with 1, 2 and 4 mg. of hydrocortisone— show progressively smaller thymuses as does Group C— injected with fluocinolone acetonide— but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY¹⁻⁴ also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. **PRECAUTIONS:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for pro-

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

longed periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. **SIDE EFFECTS:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. *Ann NY Acad Sci* 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. *Proc Soc Exp Biol Med* 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: *Methods of hormone research*, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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dermatoses...
by any measure
a topical corticosteroid
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Synalar® (fluocinolone acetonide)

Milligram for milligram
one of the most active topical
corticosteroids available

Rapid and predictable
in antiinflammatory and
antipruritic activity

Results often comparable to
those of systemic corticosteroids
with fewer hazards

The Woman's Auxiliary

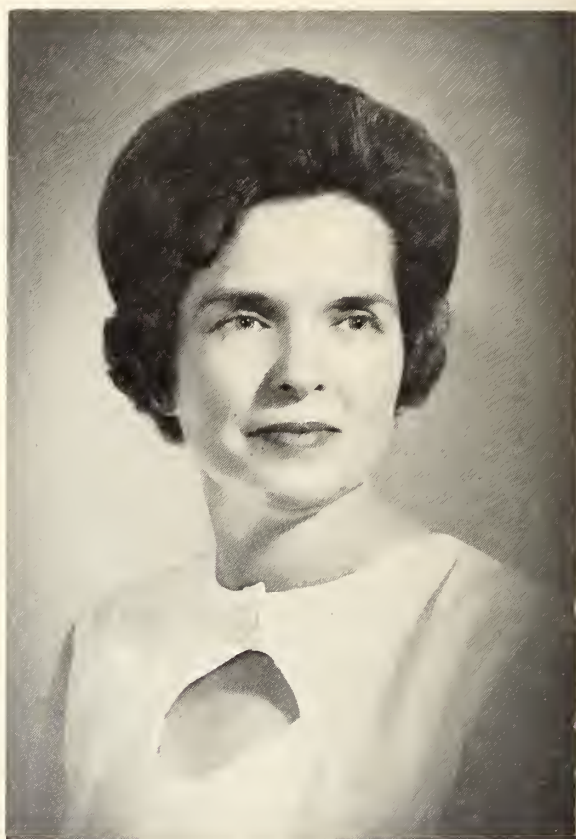
"It is a most mortifying reflection for a man to consider what he has done, compared with what he might have done." Samuel Johnson. This statement clearly defines how I feel about this past year of service, which I have been privileged to give to the Medical Auxiliary. I am sincerely grateful for the kindness and courtesy shown me in my county visits and as a representative to other groups, trusting that my participation has provided a worthwhile service.

Believing that our Medical Auxiliary meetings should be composed of programs that concern problems of the medical profession, at each county meeting that requested a speech I have tried to stress this phase. How can the Auxiliary create an awareness of these problems and motivation toward solving them? We must carry the message, problems of the elderly, personnel shortages, mental care needs, school health education and community co-operation.

Realizing it's impossible for doctors to have the time to participate in the many civic affairs that is expected of them, wives have been urged to share this responsibility. Many demands are made upon the present day physician's wife, and she must budget her time wisely, using it where she feels it will be most profitable to her, her husband, family and community. To use her time to the best advantage she must become well informed of medical problems and solutions.

Mr. John W. Gardner, Secretary of the Department of Health, Education and Welfare in Washington, D. C. wrote: "This country achieved greatness in an era when changes came more slowly than now. Then problems facing society took shape at a stated pace. We could afford to be slow in recognizing them, slow in coping with them. Today, problems of enormous import hit us quickly. Great changes emerge with frightening speed. We can no longer think or act in a leisurely fashion."

Correlating our state program with the na-



Mrs. Ira B. Patton

tional format, we are trying to become problem oriented rather than committee-oriented. To succeed we need to become cognizant of public health education, poverty and welfare problems. We need voluntary leadership from capable women. Particularly we need to avoid being parasitic members (parasite as defined by Webster, "One who eats by flattery, a hanger on or one who lives at another's expense often by means of flattery, useless person, doing no work, but living in comfort at the expense of others."). This includes the wives who may have worked hard, made many sacrifices to achieve their position but then go on their pedestal and haven't done a worthwhile thing since. At one time she was a hard worker, lively, intelligent looking and acting, but now seems to exist to wear beautiful clothes, look pretty and carry on meaningless conversation. She

(Continued on Page 1175)

IT'S AS PLAIN
AS THE
NOSE ON HIS
FACE.



UP TO 10-12 HOURS' CLEAR BREATHING ON ONE TABLET

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

itis, colds, or U.R.I.,
pp lets congested patients
easy again. Each Extentab
welcome relief all day or all night,
without drowsiness or over-
tion. Its key to success? The
op formula—Dimetane (brom-
imine maleate), a potent anti-
ine reported in one study to have
side effects as few as the placebo,*
e with decongestants phenyl-
in and phenylpropanolamine—
endable 10- to 12-hour form.

W., and Lowell, F. C.: New England
478, 1959.

Contraindications: Patients hypersen-
sitive to antihistamines. Not recom-
mended for use during pregnancy.

Precautions: Until the patient's
response has been determined, he
should be cautioned against engaging
in operations requiring alertness.
Administer with care to patients with
cardiac or peripheral vascular
diseases or hypertension.

Side Effects: Hypersensitivity
reactions including skin rashes,
urticaria, hypotension and thrombo-
cytopenia have been reported on

rare occasions. Drowsiness, lassitude,
nausea, giddiness, dryness of the
mouth, mydriasis, increased irritability,
or excitement may be encountered.

Dosage: 1 Extentab morning
and evening, or as needed.

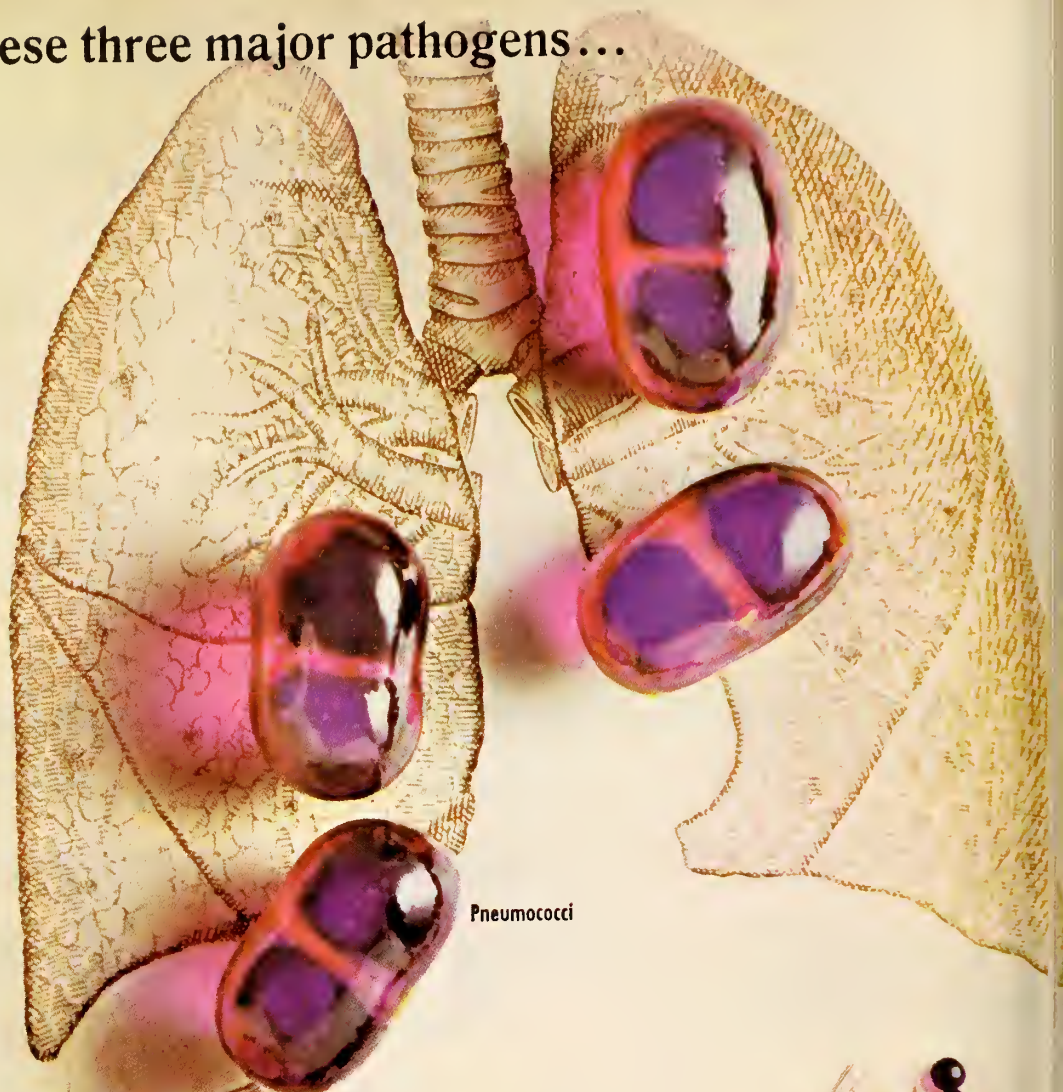
Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for
conventional *t.i.d.* or *q.i.d.* dosage.
See package insert for further details.

A. H. ROBINS CO., INC.
RICHMOND, VIRGINIA 23220

A-H-ROBINS

Against these three major pathogens...



Pneumococci

Penicillin-Sensitive
Staphylococci



Beta-Hemolytic
Streptococci



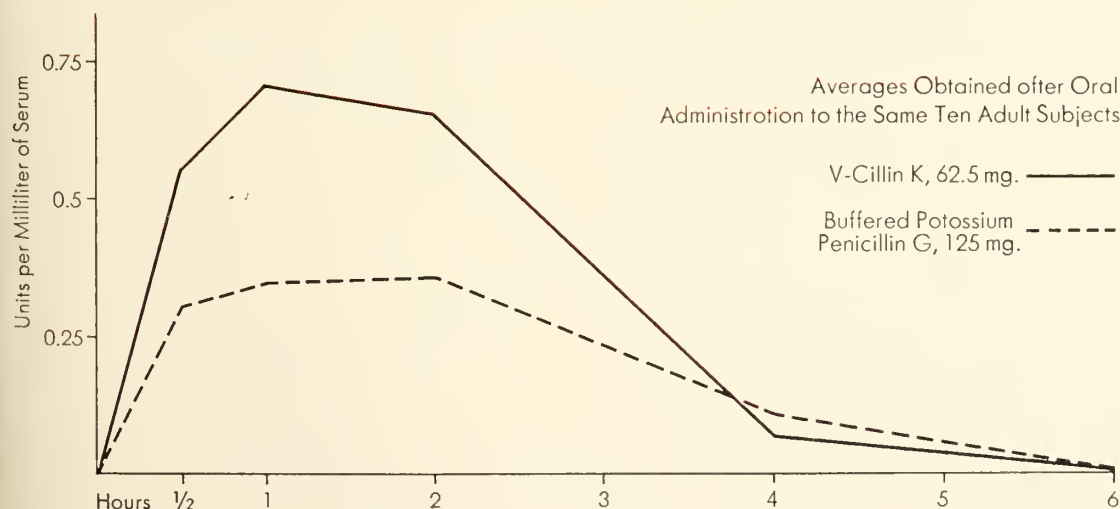
V-Cillin K[®] provides unexcelled oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive)		Streptococcus, Group A		Diplococcus Pneumoniae	
	MIC (mcg./ml.)		MIC (mcg./ml.)		MIC (mcg./ml.)	
	Median	Range	Median	Range	Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food

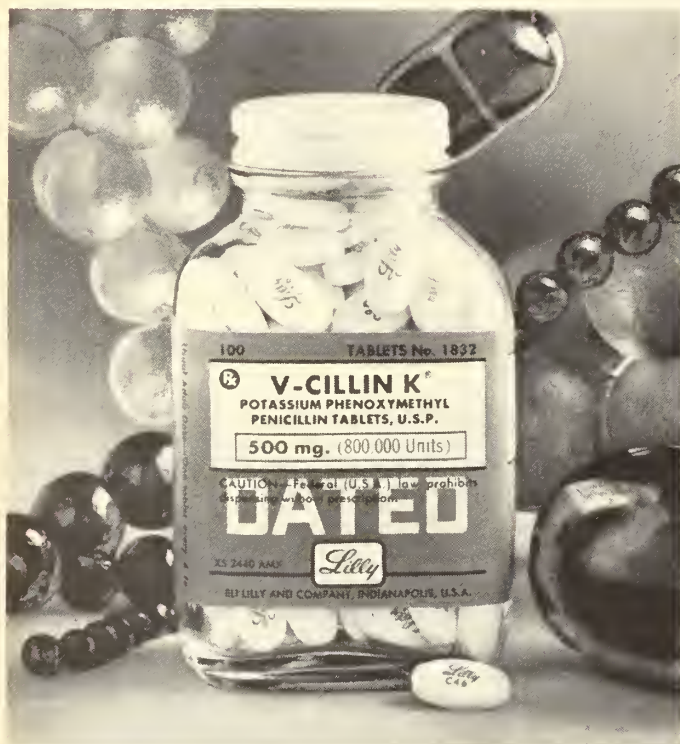


Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

V-Cillin K[®]  700157
Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high dose



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxy-methyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxy-methyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in

those who have previously demonstrated sensitivity. If penicillin hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are less common with administration of oral penicillin than with intracellular forms, skin rash, symptoms resembling those of serum sickness, and other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the growth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight into three doses.

Beta-hemolytic streptococcus infections without associated toxemia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 200,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderate severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of the eye should have a dark field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) in bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.



WOMAN'S AUXILIARY

(Continued from Page 1170)

is seen at Auxiliary luncheons that have fashion shows, if at all. She has developed into nothing more than pre-mature mental senility. Not a worth-while thought or original idea has passed through her head in years. She can find time to golf—if it isn't too hot; bridge—if it doesn't interfere with her nap; shop—if the stores aren't too crowded. We do have these members, but they are a small number.

Most Auxiliary members realize that when they married a doctor that the treating of the sick would always be his main concern and interest. Our doctor husband comes first in our lives. We are our husbands' keepers and therefore the handmaidens of medicine. Keeping ourselves intelligently informed of the latest happenings in the medical world we will find a great deal of satisfaction in sharing the responsibilities by helping our husbands solve our community health problems. There is no greater joy than working together with someone you love for the good of mankind. Just as our husbands are happy in their work helping the sick, our joy can come from helping others.

Physicians' wives, we are most fortunate to have an Auxiliary organization so that we may contribute to the advancement of medicine and public health. Let the helping hand of each Alabama doctor's wife reflect and enrich his dedicated service.

Mrs. Ira B. Patton

—Mrs. Ira B. Patton

SEE YOU AT
ANNUAL CONVENTION
IN
MONTGOMERY, ALABAMA

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

*The
fast-disintegrating
uncoated tablet
gives relief in
15 minutes*

Each tablet contains:

Potassium Iodide 195 mg.
Aminophylline 130 mg.
Phenobarbital, Caution: May be habit forming . . . 21 mg.
Ephedrine HCl 16 mg.

FEDERAL LAW PROHIBITS

DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



There are 35,700* undetected diabetics in Alabama

Most of these are probably among patients over 40; the overweight; relatives of diabetics, and mothers of large babies. By the time polyphagia, polyuria, polydipsia, pruritus or other overt symptoms of diabetes appear, damage may have been done that could have been minimized. DEXTROSTIX® gives you a reliable blood-glucose estimate in 60 seconds.

Why Wait?



*Based on Statistical Report, U.S. Dept. Commerce, ed. 86, and Fisher, G. F., and Vavra, H. M.: Pub. Health Rep. 80:961 (Nov.) 1965.

Note: DEXTROSTIX is not meant to replace the more precise analytical laboratory procedures such as needed in glucose tolerance testing.

AMES COMPANY, Division Miles Laboratories, Inc., Elkhart, Indiana, U.S.A. 42867



Ames



Editorial COMMENT

The Gavel Passes

Before another fortnight, the gavel of authority of the Medical Association of the State of Alabama will pass from the capable hands of J. O. Finney of Gadsden into those of E. Bryce Robinson, Jr., of Fairfield.

The 106th Annual Session in Montgomery will bring to a close a most illustrious career of service for Dr. Finney, who served as a member of the Board of Censors for 13 years before assuming the presidency last year.

The office of President yearly grows more demanding with the increasing involvement of State and Federal governments into the clinical practice of medicine. Since passage of the Kerr-Mills law in 1960, designed to relieve the financial distress of the indigent aged, the medical profession has been confronted with new demands from both public and politicians to dispense its services to more and more persons under a predetermined government formula.

Today we labor under such Federal beneficence as Head Start, the Poverty Program, and Appalachia in addition to the all-embracing Public Law 89-97 with its Titles XVIII and XIX, calculated to provide first-rate medical care to all of the indigent and not-so-indigent of all age groups, as well as to the blind, the lame and the illegitimate.

Recently the public press has been filled with dire warnings that the cost of providing medical service through government largess to more than one-third of the U. S. population could bankrupt the country. Legislators who

rushed pell mell into this program without having the remotest conception of the total cost are now implying that the greediness of hospitals and physicians are responsible for this fiscal dilemma. In fact, this statement was made by an editorial writer in recent days who had originally opposed Medicare legislation and predicted that its cost would be astronomical.

When Medicare was being debated in the Congress many members of this Association, in concert with physicians throughout the U. S., warned that socialized medicine on such a broad scope was neither needed nor financially feasible in this country.

The burden of keeping members informed relative to the changing pattern of medical practice has fallen largely upon the President of this Association. During the past few years the Presidents have travelled thousands of miles, appearing before countless medical and paramedical groups, in an endeavor to keep all concerned abreast of the latest developments in the socialization of medicine.

That these dedicated officers have performed at tremendous personal sacrifice entitles them to the respect and gratitude of every member of this Association. It is safe to assume that Dr. Robinson will serve with equal diligence and that the gavel of the President will repose in the hands of a man who already has proven to be a conscientious and dedicated servant of Medicine.

(Continued on Page 1180)



"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"



The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis

EDITORIAL SECTION

(Continued from Page 1177)

Medicare or "Redicare"?

It had to come sooner or later. The only surprise is that it took this long.

A federal court in California has ruled that a section of the Medicare Act which denies benefits to applicants who are members of Communist groups is unconstitutional.

What the court said in so many words is that aged Reds can spend the days they feel good trying to overthrow the government of the United States but if they are feeling poorly they can be hospitalized and cared for at the expense of the same government.

Like we said before, it would have been a surprise only if the court had ruled otherwise.

LBJ's Word Game

Wilfred J. Funk of Funk and Wagnalls fame was once asked to compile a list of 10 words which he considered to be the most "beautiful in meaning and in musical arrangement of their letters."

Funk sifted carefully through thousands of words before reaching his decision on the Top Ten. They were: dawn, hush, lullaby, murmuring, tranquil, mist, luminous, chimes, golden and melody. Had proper names been allowed we personally would have insisted on the inclusion of Mesopotamia.

We cannot help but wonder what would be the outcome if LBJ was given an opportunity to compile a list of his most beautiful words. We suspect that "giveaway" and "throwaway" would surely be near the top; "ambition" would not be far behind; and "expediency" would likewise be in the first division.

After that we suggest he would give consideration to "welfare," "demonstrations," "federalization" and "consensus."

And would you believe "socialism"? We would.

Sparkling Soft Drinks . . .

**pleasure for
patients
who need
liquids**



Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

Alabama Bottlers Association

P. O. Box 2181

Montgomery, Alabama 36103

Researchers Paint Profile of Typical Fat American

Four of the world's leading medical authorities on obesity met in a seminar discussion of what a Swiss investigator has termed "an overlooked but immensely serious disease more common than the cold and perhaps a far greater contributor to Man's unhappiness and loss of life than even cancer."

This statement, quoted by Dr. Jean Mayer, director of the Department of Nutrition at Harvard University's School of Public Health, marked the opening of the Strassenburgh Obesity Seminar held under the auspices of Strassenburgh Laboratories, a division of Wallace & Tiernan.

Dr. Mayer holds a Ph. D. in physiological chemistry from Yale University and a Doctor of Science degree from Sorbonne University, Paris. He had previously been affiliated with the United Nation's Food and Agriculture Organization.

In his discussion, Dr. Mayer placed particular emphasis on the physiology of obesity and the sensation of hunger. Among obese patients, Dr. Mayer said, abnormalities in satiety may be much more common than abnormalities in hunger.

"Folklore to the contrary, research indicates obese subjects miss breakfast, lunch or dinner more frequently than the non-obese. They eat sweet desserts less often but they clear their plates more often and tend to eat more snacks in the absence of hunger sensations."

"However," he explained, "it is at the end of meals that obese subjects differ most from non-obese. They require more willpower to stop eating, even though they report frequent sensations of discomfort at the end of meals. They are preoccupied with thoughts of food after a meal—a phenomenon which is rarely found in the non-obese."

Another participant in the Strassenburgh seminar was Dr. Burton Cohen, senior at-

tending cardiologist at St. Elizabeth's Hospital, Elizabeth, N. J., and assistant professor of clinical medicine at New Jersey College of Medicine and Dentistry, Jersey City. He is also associate director of the White Cardiopulmonary Institute, Pollak Chest Hospital, Jersey City.

Dr. Cohen discussed the treatment of obesity as a medical disease in office practice. He noted that of 30 consecutive patient examinations over an eight-month period, nearly half (48.3 per cent) were classified as medically obese.

Among this group, 12.3 per cent had high blood pressure; 10.3 per cent showed an elevated blood cholesterol level; 9 per cent had a history of gall bladder disease.

Another 7.7 per cent were diabetic while 6.7 per cent gave evidence of heart damage from arterial blockage.

Dr. Cohen indicated the use of prolonged release anorectic agents as part of a comprehensive supervised program of weight reduction "can produce very satisfactory results."

"Over an average of 6.5 months, 35 obese patients suffering from high blood pressure reduced their average body weight from 204.6 pounds to 171.8 pounds. Average blood pressures for this group dropped from 189.0/105.0 to 138.4/83.3."

"Similarly, in the management of 19 patients with diabetes mellitus, an average weight reduction for the group to 170.9 pounds from 189.8 pounds allowed the average insulin requirement to be nearly halved from an average of 37.0 units to 19.2 units."

Another panelist, Dr. Edgar Stillwell Gordon, described the relationship between metabolism and obesity. A graduate of Harvard University's School of Medicine and a former resident in pathology at Massachusetts General Hospital, Boston, Dr. Gordon is now professor of medicine and chief of the divi-

sion of metabolism and endocrinology at University Hospital, Madison, Wis.

"Obesity may be related to individual differences in the thermodynamic efficiency of the 'human engine' from person to person. If it is even one or two per cent inefficient, a person can become obese."

"There appears to be a progressive loss of ability to oxidize glucose sugars from the normal individual to the mildly obese to the diabetic obese. A similar pattern seems to take place in oxidation of fatty acids."

Dr. Gordon stressed that there are "many oddities of metabolic behavior in the obese and we're not sure if these differences between normal and obese patients are the result or the cause of the obesity."

"I still think," Dr. Gordon said, "that people are obese because they eat too much, but what is too much for one man is not too much for another."

A fourth participant in the Strassenburgh seminar was Dr. Alvan Richard Feinstein, presently associate professor of medicine at

Yale University. Dr. Feinstein received his medical degree from the University of Chicago and served as a visiting investigator at the Rockefeller Institute Hospital and as assistant resident in medicine at Presbyterian Hospital, New York City.

Dr. Feinstein was previously director of epidemiologic studies at Irvington House, New York City, and chief of clinical biostatistics at the Veterans' Hospital, New Haven, Conn.

"The fact of obesity is of direct relevance in the presence and treatment of such conditions as diabetes, cardiovascular conditions and orthopedic ailments," Dr. Feinstein said.

"In the past," Dr. Feinstein said, "we have probably placed too little emphasis on the importance of the so-called 'Pickwickian syndrome' in which obesity causes a lessening of vital lung capacity and a characteristic 'fat boy' appearance."

"This, in turn, seriously hampers oxygen exchange and can badly upset the body's whole system of cell metabolism."



Together....

...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity¹ or side effects^{2,3} and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. 38:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. 20:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311 (Feb.) 1953.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol®
phosphorated carbohydrate
solution
emesis control

A Building Block approach to treating hypertension



With these three therapeutic building blocks
you can create a once-a-day regimen to fit almost any degree
of hypertension. See the following pages for details . . .



Consider starting your hypertensives on this basic thiazide



Enduron eliminates sodium around the clock, yet is relatively sparing of potassium

Enduron is a true 24-hour single-dose thiazide. Its sodium excretion is not squeezed into an abrupt peak during the first several hours. It is well-sustained in a plateau-like effect — with little reduction in intensity during the first 12 hours, and decline thereafter only gradual.

Potassium loss, in contrast, reaches an early minor peak. Then it subsides rapidly. Moreover, doses larger than 5 mg. have little added effect on potassium. Thus doubling the dose from 5 to 10 mg. approximately doubles sodium excretion—yet increases potassium loss little or none.

Use Enduron once a day as an ideal starting therapy in mild hypertension. Use it, too, as a basic therapeutic building block with which other agents can be joined, for managing your more resistant hypertensives.

Once a day, every day

ENDURON[®]
METHYCHLOTHIAZIDE



DAILY
DOSAGE
RANGE

Minimum



2.5 mg. tablet

Usual



5 mg. tablet

Intermediate



7.5 mg.

Maximum



10 mg.

See Brief Summary on final page of advertisement.

To build added response, shift to Enduronyl



The deserpidine component compares favorably
to reserpine, but with reduced side effects

The rauwolfia component of Enduronyl is deserpidine (Harmony[®]), a purified crystalline alkaloid. It is comparable to reserpine in its antihypertensive and tranquilizing activity. Yet it produces less tendency toward typical rauwolfia side effects such as drowsiness, lethargy, stuffy nose, depression, etc.

Patient acceptance has been excellent.

Enduronyl comes in two strengths: regular and Forte. Both provide 5 mg. of Enduron. The variation is where most needed: in the deserpidine. These scored tablets give a surprisingly flexible choice of doses (see below).

Use Enduronyl for your patients within the broad range of mild to moderate hypertension. Dosage is *once a day*: this means Enduronyl will generally cost patients less than equivalent drugs taken two or three times daily.

once a day, every day









ENDURONYL[®]

METHYCHLORHAZIDE 5 MG. WITH DESERPIDINE 0.25 MG.

ENDURONYL FORTE

METHYCHLORHAZIDE 5 MG. WITH DESERPIDINE 0.5 MG.



	Minimum	Usual	Intermediate	Maximum
DAILY DOSAGE RANGE	 2.5 mg. methylothiazide 0.125 mg. deserpidine	 5 mg. methylothiazide 0.25 mg. deserpidine	 7.5 mg. methylothiazide 0.375 mg. deserpidine	 10 mg. methylothiazide 0.5 mg. deserpidine
DAILY DOSAGE RANGE	 2.5 mg. methylothiazide 0.25 mg. deserpidine	 5 mg. methylothiazide 0.5 mg. deserpidine	 7.5 mg. methylothiazide 0.75 mg. deserpidine	 10 mg. methylothiazide 1 mg. deserpidine

See Brief Summary on final page of advertisement.

Eutonyl affords a different kind of basic therapy for moderate to severe cases



Effect tied to reduced peripheral vascular resistance; no central depressant action

Eutonyl is a unique nonhydrazine agent. It is reported to act by reducing peripheral vascular resistance, with little or no effect upon cardiac output.^{1,2}

In clinical trials, significant reductions in mean blood pressure were seen in 84% of patients studied — including some unusually difficult cases. Eutonyl lowers diastolic in proportion to systolic, and in half of the cases studied, reductions in the sitting and recumbent positions were nearly as great as in the standing position.

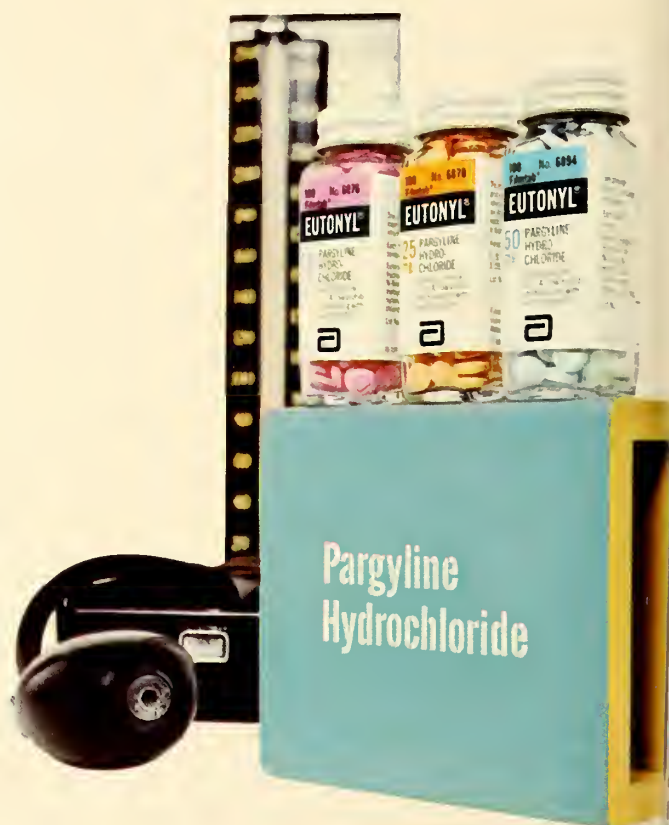
Most important: There is no central depressant action. In fact, many patients reported an *increased* sense of well being.







Here, then, is a highly effective *basic treatment* for moderate to severe cases—and one that will not hamper your patient with lethargy or drowsiness while on treatment.

Once a day, every day

EUTONYL®

PARGYLINE HYDROCHLORIDE



	Minimum	Usual starting	Intermediate	Maximum
DAILY DOSAGE RANGE	 10 mg. tablet	 25 mg. tablet	 50 mg. tablet or as needed	   200 mg.

1. Brest, A. N., et al., Cardiac and Renal Hemodynamic Response to Pargyline, Ann. N. Y. Acad. Sci., 107-1016, 1963.

2. Winsor, T., Pargyline Hydrochloride, Hypertension, Urinary Tryptamine, and Vascular Reflexes, Geriatrics, 19:598, Aug., 1964.

See Brief Summary on final page of advertisement.

Eutron adds thiazide for enhanced therapy with milder side effects



Only a 7/4 mm. span between standing and recumbent pressures—reduced chance of orthostatic hypotension

The combining of Eutonyl and Enduron in Eutron permits a significantly greater antihypertensive effect than with either agent used alone. This in turn may allow therapeutic success with lesser dosage—and correspondingly milder side effects.

Indeed, fully 94.5% of all patients studied during clinical trials continued on therapy uninterrupted by side effects.

Most striking was the drug's action in lowering blood pressure to *nearly equal levels in all body positions*. Total average spread between standing and recumbent readings (after treatment) was only 7/4 mm. Hg.

Thus, in your moderate to severe cases, Eutron affords a usually smooth course of therapy, with reduced likelihood of orthostatic effects. And, because of the thiazide component, Eutron may be used in the presence of congestive heart failure.

Once a day, every day

EUTRON™
PARGYLINE HYDROCHLORIDE 25 MG.
WITH METHYLOTHIAZIDE 5 MG.



**DAILY
DOSAGE
RANGE**

Minimum



12.5 mg. pargyline hydrochloride and 2.5 mg. methyclothiazide

Usual starting



25 mg. pargyline hydrochloride and 5 mg. methyclothiazide

Intermediate



37.5 mg. pargyline hydrochloride and 7.5 mg. methyclothiazide

Maximum



50 mg. pargyline hydrochloride and 10 mg. methyclothiazide

See Brief Summary on final page of advertisement.

TM—Trademark

704075

ENDURON[®]

METHYLCLOTHIAZIDE

ENDURONYL[®]

Each tablet contains Methyclothiazide 5 mg.
with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Enduron is used to control edema and mild hypertension. Also used with other drugs for hypertension. Enduronyl is used in mild to moderately severe hypertension.

Contraindications: Neither Enduron nor Enduronyl should be used in severe renal disease (except nephrosis) or shut-down; in severe hepatic disease or impending hepatic coma; in patients sensitive to thiazides. Enduronyl is contraindicated in severe mental depression, active peptic ulcer, and ulcerative colitis.

Warnings: Consider possible sensitivity reactions in patients with a history of allergy or asthma. Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small bowel lesions; if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions and Adverse Reactions: Use thiazides with caution in severe renal dysfunction. Caution is also necessary with impaired hepatic function or progressive liver disease. During intensive or prolonged thiazide therapy, watch chloride and potassium levels (especially the latter if patient is on digitalis). In surgical patients, thiazides may alter response to vasopressors and tubocurarine. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborn). Occasional thiazide side effects also include blood dyscrasias; elevations of BUN, serum uric acid, or blood sugar; electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout.

Use Enduronyl with caution in patients with a history of peptic ulcer, as rauwolfias may increase gastric secretion. Discontinue at the first sign of mental depression. Rauwolfias may increase hypotensive effects of surgery or anesthesia, and are best discontinued two weeks prior. They also lower the convulsive threshold in epilepsy. Other possible rauwolfia side effects include drowsiness, nasal stuffiness, nausea, weight gain, and diarrhea. Less frequent complications of deserpidine therapy are aggravation of peptic ulcer, epistaxis, and skin eruption. Alcohol, barbiturates or narcotics may potentiate action of deserpidine.

EUTONYL[®]

PARGYLINE HYDROCHLORIDE

EUTRON[™]

Each tablet contains Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.

Contraindications: Pheochromocytoma, advanced renal disease, paranoid schizophrenia and hyperthyroidism. Until further experience is gained, not recommended for use in

patients with malignant hypertension, children under 12 or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline or similar antidepressants; methyldopa. Interval of two weeks should separate therapy and use of these agents.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When necessary to administer alcohol, narcotics (meperidine should be avoided), and histamines, anesthetics, barbiturates, chloral hydrate or other hypnotics, sedatives, tranquilizers, or caffeine, these can be used cautiously at a dosage of 1/4 to 1/5 the usual amount. Adjust dose of anesthetic agents to response of patient. Avoid parenteral administration where possible. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or other evidence of coronary disease should not increase physical activity. Pargyline may lower blood sugar. Avoid use of enteric-coated potassium tablets as these may induce serious or fatal small-bowel lesion if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure. Withdraw drug if such alterations persist and progress. Use with caution in patients with liver dysfunction or progressive liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields, and fundi.

During intensive or prolonged methyclothiazide therapy watch chloride and potassium levels (especially the latter if patient is on digitalis). Methyclothiazide also may reduce arterial response to pressor amines. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborns). Thiazide drugs may increase responsiveness to tubocurarine.

Side Effects: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Drug fever is extremely rare. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Thiazide side effects also include blood dyscrasias, elevation of BUN, serum uric acid, or blood sugar, electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout. Nocturia has been observed with the combination.



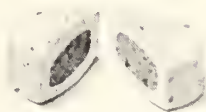
To "catch" your patient's cold
so others won't...



the speckled tablet with
a core of difference

SUSTAINED-ACTION

Naldecon®



Each tablet contains:	Outer layer (immediate action)	Core (sustained action)
phenylpropanolamine HCl	20 mg	20 mg
phenylephrine HCl	5 mg	5 mg
phenyltoloxamine citrate	7.5 mg	7.5 mg
chlorpheniramine maleate	2.5 mg	2.5 mg

Each teaspoonful (5 ml) of syrup contains the
equivalent of one-half tablet

For rapid and sustained symptomatic relief of colds and minor upper respiratory infections.

Prescribing Information: For complete information consult Official Package Circular. **Effectiveness:** Clinical experience has shown this formulation to be effective in relieving the symptoms of nasal congestion associated with pollen allergy or minor upper respiratory infections (common cold, nasopharyngitis, acute and chronic sinusitis). **Precautions:** Do not drive or operate machinery while taking Naldecon. Exceed dose or give to children under 6 years old only on advice of physician. **Contraindications:** Severe hypertension, hyperthyroidism, serious organic heart disease or severe diabetes mellitus. **Usual Dose:** Adults: One tablet morning, midafternoon and evening. Naldecon tablets are scored and may be broken for fractional dosage, without loss of sustained-action effect. **Supplied:** Bottles of 50 and 500 tablets. Syrup, 1 pt. bottle.

BRISTOL

Bristol Laboratories
Division of Bristol-Myers Company
Syracuse, New York 13201

Intrauterine Devices Offer Low-Cost Contraception

The low-cost intrauterine contraceptive devices offer hope in reducing birth rates in impoverished, underdeveloped, and disadvantaged countries.

Their use in the United States will probably be greatest among women who cannot take oral contraceptives for medical reasons and "those women who lack the motivation to follow any other contraceptive regimen," says a statement of the American Medical Association's Committee on Human Reproduction in the February 27 Journal of the AMA.

"There is abundant evidence that the IUDs (intrauterine devices) are second only to the oral contraceptives in reducing conception rates," the committee said.

"The evidence is equally convincing that IUD use is attended by frequent complications and discomfort in an appreciable number of wearers."

In view of the effectiveness and excellent safety record of the oral contraceptives, why do women (or their physicians) choose the IUDs?

Their considerably lower cost is a factor in underdeveloped countries.

"Some women or their physicians turn to IUDs because of lingering uneasiness about upsetting 'hormone balance' or long-term effects with the oral drugs," the statement said. "Hopefully, these fears will be allayed by further clinical experience."

By far the most compelling consideration in choosing a contraceptive method is the motivation of the woman or couple.

"If the birth of another child would be disastrous to a family already having more children than it can adequately support, then nothing short of the almost complete protection afforded by the oral contraceptives would be acceptable," the statement said.

"Some women, however, are unable to follow even such a simple regimen as taking one tablet a day. For such patients, an IUD—

which requires no motivation on the part of the user other than to check for its presence—appears to be the best method."

IUDs are produced in a variety of sizes, shapes and materials—plastic loops, bows, spirals, and steel rings—and their effectiveness varies.

A study of 22,403 women using IUDs showed pregnancy rates after one year to vary from 1.8 per 100 women using the large plastic spiral to 11.9 per 100 for the small plastic bow. In general, pregnancy rates for all devices are higher for the small sizes.

"It is apparent from the large quantity of data already accumulated that there is a great variation in both the effectiveness and the number of complications with the various IUDs," the AMA committee statement said.

"No device is clearly superior on all counts, nor is any device uniformly inferior. The choice rests upon such factors as the degree of motivation of the wearer.

"For example, is she willing to tolerate a higher incidence of side effects to achieve maximum contraceptive effectiveness with the large spiral? Or is she willing to risk a higher chance of pregnancy for the increased comfort of say, the steel ring?

"Taking into account such criteria as pregnancy, expulsion, bleeding or pain, and pelvic inflammatory disease, experience indicates that the larger loops appear to be the most promising," the statement said.

Perforation of the uterus is the most serious potential complication of IUD use, but it has been reported only rarely. Other serious complications include imbedded devices, fragmentation of the IUD during removal, and laceration of the cervix during insertion.

"Bleeding after insertion occurs with such regularity that it may be considered an expected consequence of initial IUD usage," the report said. "Most IUD users also note that for one or two months menstrual flow is heavier and somewhat longer than before in-

(Continued on Page 1192)

Estomul does what standard anticholinergics fail to do—it provides a continuous climate for ulcer healing, eliminating the peaks and valleys of ordinary therapy. It is a comprehensive formulation providing sustained antisecretory effect on gastric activity. A recent study¹ reported a 56% satisfactory response with a maintenance schedule of Estomul in patients refractory to all previous medication. In less difficult peptic ulcer patients, a second study² noted a 94% satisfactory response. Both studies confirmed this clinical improvement radiologically. And both reported unusually prolonged reduction of basal secretion. With a maintenance course of Estomul therapy you can provide this continuous climate for healing in your own peptic ulcer patients.

A continuous climate for ulcer healing

(not simply episodic reduction of secretion or motility)

Estomul[®]

Tablets

Each swallow tablet contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 25 mg.; magnesium oxide, 45 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 500 mg.

Good-Tasting Liquid

Each tablespoon (15 cc.) contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 50 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 918 mg.

Dosage: 1 or 2 tablets or 1 or 2 tablespoons 3 times daily.

Supplied: In bottles of 100 tablets or 12 fluid oz..

Side Effects: Doses in excess of 6 tablets or 6 tablespoons daily may produce dryness of mouth or blurring of vision. Other possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Contraindicated: In glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia and myasthenia gravis.

References: 1. McHardy, G. G., Judice, R. C., McHardy, R. J., and Cradic, H.: Southern Med. J. 59:459 (April) 1966. 2. Slinger, A.: Western Med. 6:205, 1965.



Riker Laboratories • Northridge, California 91324



INTRAUTERINE DEVICES

(Continued from Page 1190)

sertion. Pain of a crampy nature, backache, and other types of pelvic discomfort also are common complaints during the initial period of use."

During the study, about 10 per cent of the devices had to be removed because of bleeding, pain, or both. Removal rates for one year ranged from 7.2 per 100 women for the steel ring to 16 per 100 for the large plastic spiral.

IUDs are not recommended for childless women because of the pain caused by insertion and the danger of uterus damage.

Insertion of the spiral and loop is not difficult and is relatively painless. Removal also is easy.

"On the other hand, insertion of the larger-diameter bows and the steel rings is considerably more difficult and painful," the report said. "Dilation of the cervix is almost always necessary for these devices. Removal of these devices can also be extremely difficult and painful."

These procedures should preferably be done by physicians with training and experience in gynecology.



Reprinted from *The New Physician*

Tandearil® oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardley, New York

Geigy

Tandearil®
oxyphenbutazone

helps osteoarthritic
joints move again



Please see ad-
joining page for
brief prescribing
summary

TA-4919 PC

Sperling, I. L.: "3 Years' Experience
with Oxyphenbutazone in the
Treatment of Rheumatic Disorders,"
Applied Therapeutics 6:117, 1964

Watts, T. W., Jr.: "Treatment of Rheu-
matoid Disorders with Oxyphenbu-
tazone," Clin. Med. 73:65, 1966.

3 out of 4 osteoarthritics com-
pletely or markedly improved

76.9% of 407 patients

84.6% of 39 patients

PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. Further information is available from the central office, 19 South Jackson Street, Montgomery, Alabama 36104—or Phone 263-6441.

LOCATIONS WANTED

Anesthesiology—

Age 33; married; Stritch Sch. of Medicine 1957; Certified Am. Bds.

General Surgery—

Age 35; married; Stritch Sch. of Medicine 1957; Board eligible; military oblig. completed; available immediately. (Husband and Wife) LW-73

Anesthesiology—

Age 48; single; Univ. of Tenn. College of Med. 1950; Board eligible; available immediately. LW-74

Dermatology—

Age 51; married; Emory Univ. Sch. of Medicine 1951; Certified Am. Bds., military obligation completed; available immediately. LW-75

General Practice—

Age 36; married; Univ. of Louisville 1965; previous military experience; seeking group, industrial, associate, or biomedical electronics. Available immediately. LW-76

General Practice—

Age 30; married; Medical College of Virginia 1963; completing military duty; available July 1967. LW-77

Administration, Phar., Teaching, School Health—

Age 49; married; Univ. of Wisconsin 1943; military obligation completed; available immediately. LW-78

Obstetrics-Gynecology—

Age 35; married; George Washington Univ. 1957; Certified Am. Bds.; previous military experience; seeking group or associate practice; available immediately. LW-79

Obstetrics-Gynecology—

Age 32; married; Emory Univ. 1961; previous military experience; seeking group or associate practice; available August 1967. LW-80

Obstetrics-Gynecology—

Age 53; married; Northwestern Univ. Sch. Med. 1941; Board eligible; military obligation completed; available April 1967. LW-81

Internal Medicine—

Age 46; married; Yale Med. Sch. 1945; Board eligible; military obligation completed; seeking solo, group, associate or institutional practice; available immediately. LW-82

Internal Medicine—

Age 58; married; Univ. of Tennessee 1939; Board eligible; available immediately. LW-83

LOCATIONS WANTED

Internal Medicine—

Age 46; married; Bowman-Gray Med. Sch. 1945; Board eligible; previous military experience; seeking group, industrial or associate practice; available immediately. LW-84

Neurology—

Age 34; married; Univ. of Vermont College of Med. 1959; Board eligible; previous military experience; seeking group, institutional, academic. Available August 1967. LW-85

Pediatrics—

Age 31; married; Yale Sch. of Medicine 1962; Board eligible; currently completing military duty; seeking group or associate practice; available August 1967. LW-86

Radiology—

Age 47; married; Medical College of Virginia 1947; Certified Am. Bds.; seeking solo, group, associate, or institutional practice; available immediately. LW-87

General Surgery—

Academic Medicine and Teaching

Age 35; married; Ohio State Univ. 1957; Certified Am. Bds.; available immediately. LW-88

General Surgery—

Age 32; married; Yale Med. Sch. 1961; Board eligible; completing military obligation; available July 1967. LW-89

General Surgery—

(with medical school affiliation)

Age 38; married; Cornell Univ. 1955; Certified Am. Bds.; active duty military obligation completed; available July 1967. LW-90

General Surgery—

Age 34; married; Ohio State Med. Sch. 1958; Certified Am. Bds.; military obligation completed; seeking solo, group, associate, or institutional practice; available immediately. LW-91

Urology—

Age 34; married; Wayne State Univ. College of Med. 1962; previous military experience; seeking solo or associate; available July 1967. LW-92

PHYSICIANS WANTED

Pediatrician, one or two, and **Internist** needed in East Alabama. Adjoining cities of total population 40,000, with 60,000 population in the county. Accredited hospital. Office space available. Abundant recreational opportunities. Rapidly expanding industry. PW-48

PLACEMENT SERVICE

PHYSICIANS WANTED

General Practitioner-Surgeon—

Town with 2,500 population in Southwest Alabama. New 20-bed hospital with adjoining 25-bed nursing home. Several industries in an agricultural area. PW-49

General Practitioner—

Town with 2,350 population in Northeast Alabama. Clinic available. Excellent recreational facilities near lakes. PW-50

General Practitioner—

Town with 1,000 population in trade area of 5,000 in Barbour County. No physicians in town. Hospitals in surrounding towns, only 30 miles. Nearest large city with population of 50,000 is 55 miles. New clinic available rent free. Several churches and two schools. Farming, timber, and textile industries. Excellent recreational facilities. PW-51

General Practitioner—

For small town in Franklin County, near Tennessee Valley waterways; population 2,000 with large trade area; schools and churches. PW-52

General Practitioner—

For town of 2,000 population combined with nearby town of 1,000 in central Alabama. Trade area over 8,000. Truck farming, timber, and fruit

industries. Hospitals 9 miles. Clinic available rent free. Churches and schools. PW-53

General Practitioner—

For State College in North Alabama. Excellent opportunity and geographical location. PW-54

General Practitioner—

Town in north central Alabama, 1,300 population. Two hospitals only nine miles distant. Clinic furnished. PW-55

General Practitioner—

Town in South Alabama, approx. 50 miles from Gulf Coast. Trade area of 30,000. New 27-bed hospital. Office space rent free. PW-56

General Practitioner-Surgeon

For town in Franklin County, population 7,500, with trade area of 25,000. To be associated with established surgeon in four-man clinic. Fully accredited hospital. PW-57

General Practitioner—

Town in Shelby County, population 2,000, short distance from large lake area. New clinic, rent free first year. Option to buy or rent clinic. PW-58

General Practitioner—

Town in Northwest Alabama, near Tennessee Valley waterways. New 15-bed clinic available, centrally located near metropolitan area. PW-59

APPALACHIAN HALL

ESTABLISHED 1916

ASHEVILLE

NORTH CAROLINA



An institution for the diagnosis and treatment of psychiatric and neurological illnesses, rest, convalescence, drug and alcohol habitation.

Insulin coma, electroshock and psychotherapy are employed. The institution is equipped with complete laboratory facilities, including electroencephalography and x-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin, Jr., M. D.
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around the state

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McDaniel, Millie Martha, 589½ Shades Crest
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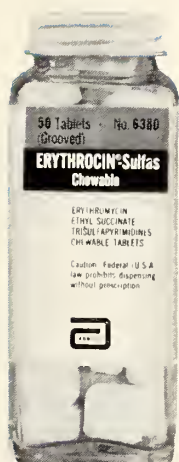
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(Continued on Page 1200)



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

¹Case Reports on File, Dept. Clin. Development, Abbott Laboratories.

²Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



ERYTHROCIN-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief Summary on next page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



VITAL STATISTICS

(Continued from Page 1197)

Hospital, 2506 16th Avenue North, Birmingham, Ala., 35234. (Jefferson County Medical Society.)

Syslo, Joseph Albert, P. O. Box 191, Sheffield, Ala., 35660. (Colbert County Medical Society.)

Deaths

Ford, Hugh G., Lloyd Noland Hospital, Fairfield, Ala. Deceased. (Jefferson County Medical Society.)

Remove—Nonmember

Peavy, Julius Franklin, Jr., Atmore, Ala. Deceased, June 2, 1966.

Change of Address

Andrews, George L., present Ozark, Ala., to 733 South Union Avenue, Ozark, Ala., 36360. (Dale County Medical Society.)

Banton, Howard S., Jr., present Union Springs, Ala., to Hill 'N Dale Drive, Union Springs, Ala., 36089. (Bullock County Medical Society.)

Bradley, Eugene H., present Centre, Ala., to 901 Cedar Bluff Road, Centre, Ala., 35960. (Cherokee County Medical Society.)

Burns, James H., present Centre, Ala., to 901 Cedar Bluff Road, Centre, Ala., 35960. (Cherokee County Medical Society.)

Campbell, William J., present Centre, Ala., to 440 West Main Street, Centre, Ala., 35960. Cherokee County Medical Society.)

Cohn, Sidney A., present Union Springs, Ala., to 503 Boulevard, Union Springs, Ala., 36089. (Bullock County Medical Society.)

Crabtree, James C., Jr., present Birmingham, Ala., to Woodward Iron Company Clinic, Birmingham, Ala. (Jefferson County Medical Society.)

Cunningham, Joseph A., present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

- Curtright, William H., Jr., present Monroeville, Ala., to 1114 Beachwood Drive, Monroeville, Ala., 36460. (Monroe County Medical Society.)
- Dumas, Harold, present Clanton, Ala., to 4th Avenue North, Clanton, Ala., 35045. (Chilton County Medical Society.)
- Eddins, Woodrow W., present Monroeville, Ala., to Drawer 812, Monroeville, Ala., 36460. (Monroe County Medical Society.)
- Emfinger, Orizaba, present Union Springs, Ala., to Hill 'N Dale Drive, Union Springs, Ala., 36089. (Bullock County Medical Society.)
- Fisher, Gilbert E., present Union Springs, Ala., to Route 3, Union Springs, Ala., 36089. (Bullock County Medical Society.)
- Greene, Walter L., Jr., present Selma, Ala., to 726 Dallas Street, Selma, Ala., 36701. (Dallas County Medical Society.)
- Hamilton, John R., present Gadsden, Ala., to 311 South 5th Street, Gadsden, Ala., 35901. (Etowah County Medical Society.)
- Hanks, Boyce L., present Frisco City, to Box A, Frisco City, Ala., 36445. (Monroe County Medical Society.)
- Harris, Herbert A., present Birmingham, Ala., to 2457 Shades Crest Road, Birmingham, Ala., 35216. (Jefferson County Medical Society.)
- Haygood, James K., present Union Springs, Ala., to 211 Chunnenugee, Union Springs, Ala., 36089. (Bullock County Medical Society.)
- Hubbard, John L., Jr., present Chatom, Ala., to P. O. Box 340, Chatom, Ala., 36518. (Washington County Medical Society.)
- Hundley, Rube R., present Birmingham, Ala., to 211 West Main Street, Dothan, Ala., 36301. (Jefferson County Medical Society.)
- Johnson, Joe H., present Clanton, Ala., to Lay Dam Highway, Clanton, Ala., 35045. (Chilton County Medical Society.)
- Marshall, Wallace S., present Anniston, Ala., to 6009 Bridgit Street, Metairie, Louisiana, 70001. (Calhoun County Medical Society.)
- McGehee, Thomas F., Jr., present Huntsville, Ala., to 726 Madison Street, S. W., Huntsville, Ala., 35801. (Madison County Medical Society.)
- McLaughlin, Robert J., present Ozark, Ala., to 314 James Street, Ozark, Ala., 36360. (Dale County Medical Society.)
- McRae, James D., present Montgomery, Ala., to 2119 East South Boulevard, Montgomery, Ala., 36111. (Montgomery County Medical Society.)
- Moore, Charles R., present Clanton, Ala., to 6th Street North, Clanton, Ala., 35045. (Chilton County Medical Society.)
- Moore, Joseph W., present Clanton, Ala., to 6th Street North, Clanton, Ala., 35045. (Chilton County Medical Society.)
- Nicholas, Francis E., present Monroeville, Ala., to 326 Luzenby Avenue, Monroeville, Ala., 36460. (Monroe County Medical Society.)
- Nichols, Robert K., present Prattville, Ala., to 136 Second Street, Prattville, Ala., 36067. (Autauga County Medical Society.)
- Oliver, Robert K., present Tuscaloosa, Ala., to 1601 Chenault Drive, S. E., Decatur, Ala., 35601. (Tuscaloosa County Medical Society.)
- Parker, Walter E., present Prattville, Ala., to 136 Second Street, Prattville, Ala., 36067. (Autauga County Medical Society.)
- Patterson, Herman C., present Chatom, Ala., to P. O. Box 340, Chatom, Ala., 36518. (Washington County Medical Society.)
- Petcher, Paul W., present Chatom, Ala., to P. O. Box 340, Chatom, Ala., 36518. (Washington County Medical Society.)
- Poteet, James E., present Montgomery, Ala., to 2119 East South Boulevard, Montgomery, Ala., 36111. (Montgomery County Medical Society.)
- Rennings, Wilbur W., present Clanton, Ala., to Lay Dam Highway, Clanton, Ala., 35045. (Chilton County Medical Society.)

(Continued on Page 1202)

VITAL STATISTICS

(Continued from Page 1201)

Samuels, Joseph W., Jr., Rooms 729-730 Masonic Temple, 1630 Fourth Avenue North, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Sherer, Raymond J., present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Smith, M. Dale, present Gadsden, Ala., to P. O. Box 284, Gadsden, Ala., 35902. (Etowah County Medical Society.)

Smith, Rayford A., present Monroeville, Ala., to 1116 South Alabama Avenue, Monroeville, Ala., 36460. (Monroe County Medical Society.)

Smith, Rayford A., Jr., present Monroeville, Ala., to 1116 South Alabama Avenue, Monroeville, Ala., 36460. (Monroe County Medical Society.)

Stanley, James F., present Prattville, Ala., to 901 Gipson Street, Prattville, Ala., 36067. (Autauga County Medical Society.)

Stevenson, Edward W., present Birmingham, Ala., to Professional Arts Building, 1025 Eighteenth Street South, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Tew, Walter C., Jr., present Prattville, Ala., to 136 Second Street, Prattville, Ala., 36067. (Autauga County Medical Society.)

Till, Walter H., present Prattville, Ala., to 136 Second Street, Prattville, Ala., 36067. (Autauga County Medical Society.)

Tyler, Ruby L. E., present Tuscaloosa, Ala., to 807 Queen City Avenue, Tuscaloosa, Ala., 35401. (Tuscaloosa County Medical Society.)

Vaughn, Henry M., present Birmingham, Ala., to 1101 Regent Drive, Birmingham, Ala., 35226. (Jefferson County Medical Society.)

Whetstone, Jack M., present Monroeville, Ala., to 1 Short Street, Monroeville, Ala., 36460. (Monroe County Medical Society.)

White, William W., present Centre, Ala., to 411 West Main Street, Centre, Ala., 35960. (Cherokee County Medical Society.)

Wilson, Frank C., present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Wilson, Frank C., Jr., present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala., 35205. (Jefferson County Medical Society.)

Winslow, Robert C., present Bynum, Ala., to Anniston Army Depot, Anniston, Ala., 36201. (Calhoun County Medical Society.)

Transfers

Glover, Lester B., 4233 Wilderness Road, Birmingham, Ala., 35213. (Transfer from member Marshall County Medical Society to member Jefferson County Medical Society.)

Thomas, James B., Jr., Atmore, Ala., moved out of state to Texas. (Escambia County Medical Society.)

Summer Courses in Medical Librarianship

Courses in Medical Librarianship, approved by the Medical Library Association, will be offered in the summer of 1967 at the following library schools:

Columbia University School of Library Service, July 3-August 11.

Emory University Division of Librarianship, June 17-July 28.

University of Illinois Graduate School of Library Science, June 26-July 27.

University of Michigan Department of Library Science, June 27-July 21.

University of Southern California School of Library Service, June 19-July 28.

(Continued on Page 1206)

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Hospital of Virginia.....Richmond, Virginia
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The FILTER QUEEN sanitary filter cone is a scientifically-designed dust separator, composed of a special long-fibred mat of pure cellulose, chemically treated to give it the necessary strength and air-filtering characteristics.

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The engineers who perfected the FILTER QUEEN machine clearly recognized that all bag-type vacuum cleaners cannot operate with maximum efficiency because they use a porous bag. So, to make suction cleaning action truly efficient, they had to find a way to overcome the leakage in dust and dirt that so often occurs whenever a porous bag is used.

The highly successful result was an entirely *different* air flow principle, known today as Cyclonic Cleaning Action. By using Cyclonic Cleaning Action, FILTER QUEEN'S designers succeeded in not only collecting the dust and dirt normally collected by vacuuming; they also succeeded in trapping almost invisible airborne contaminants that formerly escaped back to repollute the air.

The difference between FILTER QUEEN'S remarkable Cyclonic Cleaning Action and ordinary vacuuming becomes immediately apparent when the Smoke Test pictured at left is made. Smoke, other contaminants and offensive odors virtually disappear. The room not only smells clean—it *is* clean!

The key to this almost magic action is FILTER QUEEN'S patented Sanitary Filter Cone. (See illustration.) Inrushing air, laden with dirt and dust, is deflected by a patented inlet guide as it enters the FILTER QUEEN container, then is whirled away by centrifugal force. Foreign matter heavier than air is forced to the bottom and the sides.

Clean air is filtered through our exclusive Sanitary Filter Cone *above* floor level, leaving smoke as well as dirt and dust trapped in the container. That is why hundreds of hospitals and other institutions insist on the FILTER QUEEN Sanitation System over any type of vacuum cleaner.

Ask your local FILTER QUEEN Distributor to make FILTER QUEEN'S dramatic Smoke Test in your hospital. Then you will *KNOW* why we proudly call it a FILTER QUEEN Sanitation System instead of a "vacuum cleaner."

DOCUMENTARY PROOF: *We would like to send you, with our compliments, an article entitled "Air Hygiene for Hospitals" which appeared in the Journal of the American Medical Association. In this article it is explained what happened to airborne contaminants when a FILTER QUEEN was used in a series of rigidly controlled tests conducted at the Harvard Medical School. Write to Health-Mor, Inc., 203 North Wabash Ave., Chicago, Illinois 60601*



You'll find FILTER QUEEN Sanitation Systems listed in your Yellow Pages under "Vacuum Cleaners". (That's because FILTER QUEEN is fast replacing ordinary vacuum cleaners.)

FILTER QUEEN

The cleaning method that does so much more it has to be called a Sanitation System.



Taking a break at the second Annual Congress on Medicine and Pharmacy February 25-26 in Birmingham is guest speaker Dr. James Landis, of Smith, Kline and French Company and Dr. Carl A. Grote, Jr., Huntsville, Chairman Public Relations and Economics Committee, MASA. Dr. Landis spoke to the group on "Effects of New Drug Controls."



Answering a question relating to "Interprofessional Problems Medicine and Pharmacy Face," is panelist Dr. J. O. Finney, Gadsden, MASA President. Dr. Harry C. Shirkey, Birmingham, Administrator, Children's Hospital, panel moderator, and panelist Dr. John M. Chenault, Decatur, State Board of Censors, are ready to make further comment.



Stanley Susina, Ph. D., Birmingham, Samford University, makes a comment regarding "Laws Affecting Pharmacy and Medicine." Dr. Grote, an unidentified pharmacist, and Mrs. Laura Barranco, Executive Director of the Alabama Pharmaceutical Association, listen attentively.



Dr. J. Garber Galbraith, Birmingham, Professor and Chairman, Department of Neurosurgery, Medical College of Alabama, answered an avalanche of questions after he spoke on the much discussed subject "Title XIX" at the meeting.



Attorney Inge Hill of Hill, Hill, Stovall and Carter, Montgomery, answers some legal questions at the February Board of Censors meeting. The Montgomery law firm has been retained to represent MASA in legal matters.



George McKey, Narcotic Agent, State Department of Preventive Medicine, discusses the legal and illegal use of drugs at the February Board of Censors meeting.

ALABAMA CHAPTER, AMERICAN COLLEGE OF SURGEONS



President-Elect Dr. Luther L. Hill, Montgomery and 1968 Alabama Chapter, American College of Surgeons President, Dr. John M. Slaughter, Fairfield, smile for our camera.



The lovely former Ann Bottoms Wouters became Mrs. Fredrick Smith of Huntsville this past October. She's the prettiest Practicing Pediatrician in the space city. And that's the reason for all the smiles.



Dr. and Mrs. John M. Slaughter pose with Past President Dr. and Mrs. H. Gordon King.



All the ACS sessions were great, but the best sessions were around the banquet tables.

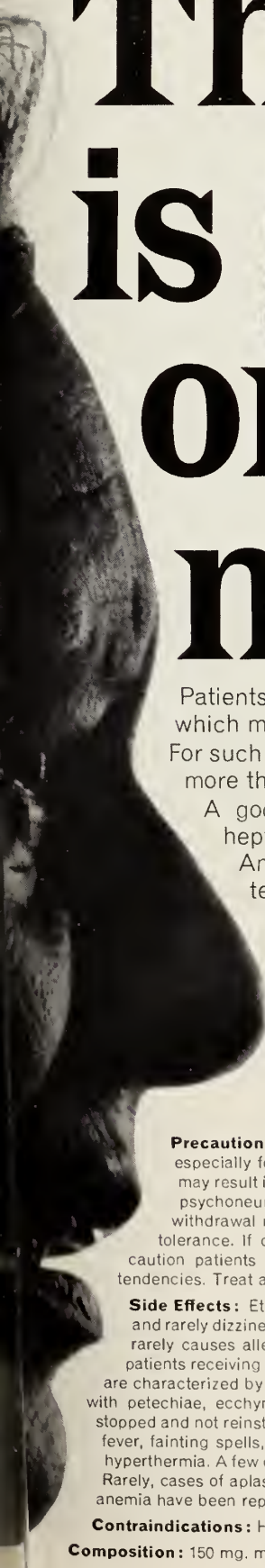


Dr. and Mrs. Julius Linn, Birmingham.



"Hi, there! Good to see you here!" seems to be the expression of Dr. and Mrs. E. B. Glenn, Birmingham, at the Point Clear ACS meeting.





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Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

April, 1967

No. 10

CASE REPORT

Use of Colon for Esophageal Replacement

By Robert Lawrence Cruik, M. D.

Gadsden, Alabama

For many years surgeons have searched for a satisfactory esophageal replacement. The purpose of this paper is to discuss some of the pertinent features relative to the esophageal replacement, to review some of the historical aspects of the problem and to present a case report.

For a number of years skin tubes were utilized to bridge the defect after an esophageal resection. Such tubes were usually fashioned from the anterior thoracic skin and required multiple operations. For the most part, the long term results with the use of skin tubes have been entirely unsatisfactory.

Several other procedures have been utilized in replacing the esophagus. Perhaps the most frequently used portion of the gastrointestinal tract has been the stomach, which has many advantages in that it is readily available for mobilization and can be easily brought above the aortic arch for anastomosis

to the esophagus in the neck, if necessary. The chief disadvantage of this technique is related to the loss of the normal cardio-esophageal sphincter mechanism. There is a reflux of the gastric contents with gastric esophagitis and its well known sequelae. There are definite disadvantages to the use of the stomach in children. When using this technique in infants, the stomach impinges on the cardio-pulmonary reserve and is frequently very poorly tolerated. The use of the colon and the jejunal segments in children are well suited for mobilization, mainly because of the rather long mesentery and also as will be pointed out later, by using the substernal tunnel procedure, the necessity for open thoracotomy is obviated in these small children. The second segment of gastrointestinal tract which has been utilized for esophageal replacement is the jejunum. The problem of mobilizing a long segment of jejunum with adequate blood supply is a

difficult one. Other objections to the use of the jejunum for an esophageal substitute are based on physiologic considerations. The jejunum will perform very well as a food conductor; however, it is highly susceptible to the effects of peptic digestion. Whenever the jejunum is anastomosed to the stomach without the aid of any type of sphincteric mechanism, varying degrees of jejunitis and esophagitis will result. This is true whether an adequately functioning pyloroplasty is present or not.

Therefore, the problem of a suitable prosthesis then would appear to be primarily in finding a segment of the bowel that can be mobilized with its blood supply and which at the same time is not susceptible to the peptic acid digestion of the gastric juices. At the present time, the colon appears to meet these requirements better than any previously used segment. It has been shown, both experimentally and clinically, that long segments of colon may be mobilized without seriously impairing the blood supply as long as the marginal artery of Drummond is preserved. Likewise, the colon is definitely less susceptible to acid digestion than the small bowel or stomach. The use of the colon for esophageal replacement has been reported in infants with esophageal atresia. Dale and Sherman point out that many children over the country have cervical esophagostomy and gastrostomy and this procedure could be used to restore intestinal continuity. Undoubtedly, there are many benign obstructive esophageal strictures from lye ingestion with very poor function still requiring frequent dilatation in whom a suitable transplant would be indicated.

Fortunately, the problem of benign strictures of the esophagus are not so prevalent as they once were. However, they still do occur and present a very difficult problem. The problem presented in carcinoma of the esophagus is somewhat different than that seen in benign disease, in that most of the time due to the grave prognosis of carcinoma, these patients do not survive for long periods of

time. Therefore, the long term outlook in these cases is rather poor, no matter which type of replacement is used.

Case Report

This patient was a 40 year old colored male who was admitted to the hospital in December 1955, approximately three or four hours after swallowing an undetermined amount of lye in a suicide attempt. Physical examination was unrevealing except for an undernourished colored male in acute distress and bringing up large amounts of bloody mucous and complaining of severe substernal pain. His blood pressure was 100/70, pulse 88, temperature 100, and respirations 20. There was some redness and edema of the pharyngeal mucosa. Otherwise, the physical examination was essentially negative. Laboratory data showed a WBC of 18,300 and a marked shift to the left in the Schilling Series. Hemoglobin was normal. Urinalysis was negative. There were no other special laboratory tests done at this time.

Course in Hospital: The patient was admitted and treated with supportive therapy consisting of intravenous fluids, antibiotics, analgesics and sedatives as needed. On the 13th hospital day, an esophagoscopy was done which revealed an esophageal stricture in the upper esophagus. He had bougie dilatation at that time. A barium swallow the following day revealed a patent esophagus with some spasm and narrowing. He was dismissed from the hospital.

However, during the next four months, there was a gradual onset and progression of obstructive symptoms of the esophagus, and at the end of four months the patient could only swallow liquids and this was with great difficulty. There had also been a 28 pound weight loss. The patient was again admitted to the hospital. Esophagoscopy and barium swallow revealed a stricture beginning just below the pharynx and extending throughout the entire length of the esophagus. During the three months, the patient had repeated dilatations of the esophagus on ten different

occasions. However, each time obstructive symptoms recurred and it was decided that esophagoplasty was indicated. The patient was then admitted to the hospital in July 1956 and was prepared for surgery. The bowel was prepared with Sulfathaladine and Neomycin. The patient had a liquid diet and saline cathartics. Surgical Technique: Under general endotracheal anesthesia, the skin was prepared from the neck to the pubis. The abdomen was opened through a right paramedian incision, extending well up on the xyphoid process and to the lower abdomen. The right colon was then mobilized, as for a right colectomy, preserving both the middle colic and marginal vessels. An appendectomy was performed. The ileum was divided just distal to the main supply of the middle colic artery, and then an end to end ileotransverse colostomy was done in the usual manner. At this point, the formation of the substernal tunnel was begun by employing finger dissection from below. The mediastinal pleura was reflected away from the sternum, using the fingers as noted in the diagram. A low collar incision was then made in the neck, similar to the routine thyroid incision. The upper skin flap was elevated. The strap muscles on the left were clamped, cut and retracted. A subtotal hemithyroidectomy on the left was done in the usual manner. The cervical esophagus was then exposed. The mediastinal pleura was then reflected from above away from the posterior surface of the sternum by finger dissection, similar to that which had been done below. The formation of the substernal tunnel was completed by using a small malleable retractor in the mid-portion of the sternum where the fingers would not meet. The tunnel formation in the anterior mediastinum was thus completed. The cecum was then tested for viability and circulation and color found to be good. The cecum was then pulled up through the substernal tunnel by using a heavy suture attached to the end of the malleable retractor. An end-cecum to side-esophagus colesopha-

gostomy was performed using a double row of silk sutures. The distal stricture of the esophagus was not removed. The transverse colon was then anastomosed to the anterior wall of the antral portion of the stomach, thus restoring the intestinal continuity in one stage. A Stamm gastrostomy was performed for postoperative feeding purposes. The neck was drained with a small rubber tissue drain. The neck incision and the abdominal incision were closed in the usual manner. Operating time was approximately 3½ hours. The patient had no operative difficulties. An immediate postoperative chest X-ray showed no evidence of a pneumothorax.

Post-operative Course: The patient was placed on broad spectrum antibiotics. Gastrostomy feedings of a high-protein liquid formula were started on the third postoperative day and were well tolerated. Oral feedings of liquids were started on the fifth postoperative day and supplemented with gastrostomy feedings. Solid foods were well tolerated by the eighth postoperative day, and then the gastrostomy tube was removed. The patient progressed rapidly and gained about 20 pounds during the next three months. Eating habits have been normal. The patient remained asymptomatic and has had follow-up barium swallows which have shown normally functioning stoma.

Summary

1. The problem of esophageal replacement is discussed and some of the various procedures which have been employed are listed and discussed briefly.
2. The rationale of the use of the colon as a prosthesis is discussed.
3. A successful case of substernal colo-esophagostomy is presented with an eight year follow-up on the patient.

(See Bibliography, Next Page)

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Emory Receives \$600,000

Emory University has received a gift of \$600,000 to endow a Chair of Family Planning and Maternal Health in the department of gynecology and obstetrics of its medical school.

The Chair, established by Mrs. Cordelia Scaife May of Ligonier, Pa., will be concerned with research, training and service responsibilities directly related to the field of family planning.

The department of gynecology and obstetrics at Emory is responsible for supervising obstetric patient care at Grady Hospital where 7,000 babies are born each year to indigent mothers.

Dr. John D. Thompson, chairman of the department, said, "We have long been concerned about the high rates of premature births and perinatal mortality among these patients."

Poverty and uncontrolled family growth have created severe health problems for many of these mothers and their families.

With the aid of funds from the U. S. Children's Bureau, the department has developed within the past year one of the largest maternal and child health projects in the country for expectant mothers with pregnancy complications.

Emory began its family planning program in 1962 with a grant from the Sunnen Foundation. The grant was increased in 1963 allowing an expansion of the program. Re-

cently, it has been described as the largest and finest hospital-based family planning program in the nation.

Some 400 patients are aided each month, according to Dr. Thompson. In the last 27 months, 6,000 intra-uterine devices have been inserted. Since the program began in 1962, 16,000 families have been given assistance with contraceptive services.

"We have developed our family planning program through phase 1 establishing the service. Mrs. May's generous gift will enable us to enter phase 2 with the development of a center for family planning and maternal health," Dr. Thompson commented.

Dr. Thompson said the center will provide service, training and research. Research is planned in both the biological and behavioral aspects of human reproduction. He hopes in the future it will be able to provide consultative services to other agencies seeking to establish family planning programs, and train personnel for such agencies. He looks forward to establishing a master's degree program in family planning and maternal health for sub-professional as well as professional personnel.

Emory and Grady form the largest obstetric training center in a radius of 500 miles in a section of the U. S. where reproductive health problems are greatest. As a result, the Chair established by Mrs. May is in an extremely strategic location.

The Dynamics of Counseling in Medical Practice

By C. Roy Woodruff, Th. D.

Tuscaloosa, Alabama

The medical profession has been a significant force operating in my life. I am the son, the brother, the brother-in-law, and the nephew of medical doctors. My own vocational aspirations were toward medicine until I felt led to enter the ministry during my college days at the University of Alabama. The medical profession has had a shaping influence on my educational, personal, and professional identity and development. Therefore, I do not feel as a stranger addressing physicians, but as a kinsman. Although my doctorate is in theology rather than in medicine, I see no sharp distinction between our roles or our professions. We are in the business of helping people live with health and meaning. Our orientations and our approaches will differ, but our goals lie in the same direction — the recovery of the person. The interpenetration of our roles comes at the point of the person to whom we are professionally responsible. At this point our roles are inseparably linked. It is the disciplined care of persons which brings us together. It is to the credit of both modern medicine and modern ministry that this inter-professional linkage is finally being realized.

The task of caring for persons, even in the context of a profession, is not an easy one when we take it seriously. People are complex assortments of feelings, fears, and physical complaints. One does not have to work in the hospital to discover that. However, what we must never forget is that those with whom we work are people. They are not

laboratory experiments or "teaching situations." They are people who have many needs, not the least of which is to be taken seriously. Paul Tournier, who perhaps best characterizes the compassionate practice of medicine, says, "The more I have to deal with human distress, the more I study men's lives with a passionate desire to understand and help them, the more I seek to throw light on the reciprocal reactions of body, mind, and spirit, the more do I understand the difficulty of practicing medicine sincerely." (*The Healing of Persons*, p. xviii) The last word in Tournier's statement is a clincher. It is the word *sincerely*. It takes no great effort or personal commitment for a man to do what he has been trained to do. However, there is a difference between just doing a job and fulfilling one's professional responsibility with sincerity. The difference is not simply a matter of approach or attitude. It may be the difference between recovery or relapse in the life of a patient. Persons respond to the healing balm of care sometimes more readily than to a drug store prescription. It is this elusive, but dynamic, interaction between the doctor and the patient which concerns us now. Tournier again says, "In spite of all the technical advances made by medicine, the deep mystery of man and disease troubles all thinking people, and especially those who are trying to heal the sick." (p. xix)

Whether he likes it or not, the doctor functions in the role of a counselor. It is up to him how seriously he wants to take this role. A part of "the deep mystery of man" is that the relationship, itself, between the doctor and the patient is going to have some in-

Dr. Woodruff is Director of Clinical Pastoral Education, Bryce Hospital.

fluence upon the response of the patient to treatment. As a chaplain in a T. B. hospital, I found that those patients who felt that they were being well taken care of and who had developed a sense of trust in their doctor were those who not only went home sooner, but were those least likely to return to the hospital. On the other hand, those who felt that they were not being cared for adequately began to develop feelings of bitterness and hostility toward the whole staff. They were those who stayed in the hospital for a longer period of time and were more likely to return. There seemed to be a noticeable change in both attitudes and the process of recovery in some recalcitrant patients during the summer months when medical externs were on full-time duty. These externs would often take time after hours to talk with the patients about their complaints and personal problems. Patients who seldom saw their doctor began to feel like they were being taken seriously and that they mattered as persons. This change of attitude made them more amenable to treatment and, therefore, increased their chances for recovery.

Tuberculosis is only one of many illnesses which has been recognized as having a strong emotional factor. There are many other instances when more therapy takes place in a relaxed conversation between doctor and patient than in the ingestion of a pill or the injection of a hyperdermic needle. Total healing takes place in the dual context of personal involvement and scientific knowledge. Since the counseling role is intrinsic to the function of the physician, he needs to be aware of basic counseling principles which should be operative in his professional relationships. These are principles rather than techniques. Techniques may vary, but certain principles need to be present in every dynamic counseling relationship.

A first principle in an effective counseling situation is that the counselor have an *interested involvement in the professional relationship*. This is getting back to that we have already said. The patient is more than a set

of symptoms. He must be seen and treated as a person. In his "interpersonal theory of psychiatry," Harry Stack Sullivan focused the importance of the professional relationship. He saw respect for the patient and sensitivity to his feelings as basic in the doctor's qualifications to treat a person. He also pointed out the significance of the interaction of the doctor with the patient. The doctor "can never observe his patient 'acting-as-if-I-weren't-here-and-he'd-never-met-me,' but can see him only 'acting-in-terms-of-his-past-and-including-me-also'." (*The Psychiatric Interview*, p. xx) The doctor, by virtue of his role, becomes a part of the life of the patient. He shares critical moments of illness with the patients. A part of his role as a counselor in a time of crisis is to let the patient know that what happens to the patient matters to the doctor. The patient, in the role of counselee, receives therapeutic benefit from the feeling that the doctor is interested in him as a person.

There are many different schools of psychotherapy and many different techniques used. It is interesting that most of them work, even on the same type of patient. Dr. Jerome Frank observes that "statistical studies of psychotherapy consistently report that about two-thirds of neurotic patients and 40 per cent of schizophrenic patients are improved immediately after treatment, regardless of the type of psychotherapy they have received, and the same improvement rate has been found for patients who have not received any treatment that was deliberately psychotherapeutic." (*Persuasion and Healing*, pp. 13-14) This says something that is worth considering. The therapeutic value received by the patient stems primarily from the relationship with the therapist, rather than the school of psychotherapy which the therapist follows. Carl Rogers probably has contributed more to an understanding of the interpersonal dynamics of a therapeutic relationship than any other contemporary psychotherapist. Rogers speaks of a "genuine equation in this subtle area of inter-personal

relationships." It goes like this: "The more that the client perceives the therapist as real or genuine, as empathic, as having an unconditional regard for him, the more the client will move away from a static, fixed, unfeeling, impersonal type of functioning, and the more he will move toward a way of functioning marked by a fluid, changing, acceptant experiencing of differentiated personal feelings. The consequence of this movement is an alteration in personality and behavior in the direction of psychic health and maturity, and more realistic relationships to self, others, and the environment." (Rogers, p. 36, *Pastoral Psychology*, April, 1961) Although the doctor does not necessarily do psychotherapy in his treatment of patients, any more than the minister does psychotherapy in his ministry to parishioners, the same principle of communicating care and concern to his patients is a basic ingredient of his responsibility.

The expressed interest on the part of the doctor-counselor activates the hoping process in the patient. There is probably no emotional response as necessary for healing as hope. Erik Erikson, a Harvard psychiatrist, sees hope as the necessary foundation of the healthily functioning personality. Without hope, the personality is seriously crippled and moves toward disintegration. Life becomes a succession of failures and low self-esteem and a hostile-suspicious orientation dominates the person's *Weltanschauung*, his world-view. The activation of hope in the life of the patient, which comes through the professional relationship, restores meaning to life and lays the foundation for the formation of trust and faith. Faith in the relationship establishes the context for health and a sense of wholeness. There is probably no other profession which generates as much interpersonal faith as does the medical profession. It is no small thing for a patient to place his life in the hands of his doctor, and I am always astounded at the readiness of a patient to have this faith in his doctor.

The importance of the professional relationship as the cradle in which this faith is born

was actualized by my own father in his relationships with his patients. A general practitioner for many years, my father had to retire from active practice due to his progressive loss of vision. Because of his devotion and sense of responsibility for his patients, it was very difficult for him to move out of this responsibility. His patients made it more difficult for him to retire. His loss of vision did not seem to matter to them. They had as hard a time accepting his disability as he did. Through the years of devotion to his profession, he had generated a tremendous amount of faith from those he treated. They knew he would come whenever they needed him, even if it was three o'clock in the morning and the temperature below freezing. They knew that he would not be so rushed in the office that he would not have time to talk with them about their problems. For these reasons they would wait patiently for hours to see him. He did not make appointments. He was simply there, and his patients knew they could depend on him. After he had closed his office, they continued to call him. When he would try to refer them to another doctor, many of them said, "Doctor, I had rather have you treat me blind than to go to anyone else." Such faith is the result of the dynamic interaction of a caring relationship. It arises out of a basic counseling principle—an interested involvement in the professional relationship.

There is a second ingredient in the counseling situation which needs to be inherent in the doctor's professional relationships. That is an *appreciation for the developmental pilgrimage of personality*. Taking a medical history is a routine task of the doctor. He needs to know the medical background of his patient before he can accurately diagnose and treat the illness. But what about the relationship between an individual's medical history and his personality development? At what points has stress been operative in the patient's life? How has he adjusted to the developmental crises of childhood, adolescence, adulthood, or old age? These factors are considered in a professional counseling

relationship. They have a bearing upon the emotional health of a person and are related to his physical health. The doctor who is aware of the dynamics of stress and the somatic complaints related to stress will take his role as a counselor seriously. He plays an important part in helping a person through life's developmental dilemmas, whether it be the young mother with her first child, the boy entering the storm and stress of adolescence, or the middle-aged woman experiencing involuntional tension.

This counseling function in medical practice can be illustrated by an incident in the life of an adolescent boy who is the son of a close friend of mine. We will call him John. John was graduating from high school and planning to enter college. A physical examination was necessary for application to college, so John made an appointment with the only doctor he had ever had a professional relationship with—his pediatrician. They had become good friends. However, John did not realize that he was out-growing his doctor. He was moving into the period of transition in late adolescence which prepares the way for young adulthood. But the doctor was aware that his patient was entering a new and important phase of life, and he took his professional responsibility to his patient very seriously. When John entered the office, the doctor took him into his private office rather than in the examining room. Instead of giving him a physical, he began to talk with John about his plans for college and the future. The conversation soon turned to the fact that John was becoming a man. To become a man means to put away childish things. The doctor carefully explained to John that the time had come for John to cease coming to the pediatrician for medical assistance. He needed to form a relationship with a doctor who treated adults, not children. It was not easy for John to break this secure professional relationship. He had relied on it for so long. But this was just one of many relationships which would be broken in the process of growing up and leaving the

security of home. John was sad as he left the office of his pediatrician, but he left a little less of a boy and a little more a man than when he entered. He went home and made an appointment with an internist for a physical examination.

Here was a doctor who took his counseling responsibility seriously in dealing with this patient. He helped a boy on his way toward becoming a man. He did it through the procedure of a professional referral, but he had an appreciation for the developmental pilgrimage of his patient and used his relationship with him as the context for effective counseling. The doctor encounters such crises in personality development every day, and he plays a vital role in guiding the person through them.

A third principle is a necessary counseling skill in medical practice. It is *sensitivity to the interpersonal, emotional, or marital conflicts which may lie behind the presenting difficulties*. This means that if a doctor is going to take seriously his counseling responsibility, a physical examination or a medical history is not enough. He must tactfully inquire into the patient's life situation deeply enough to get a picture of the total social and family involvement. In an excellent recent publication, entitled *Marriage Counseling in Medical Practice*, a number of doctors describe the significance of marital problems in the etiology of physical distress. In the Foreword to the book, C. Nash Herndon, M. D., writes:

"It is unfortunate that most physicians have largely ignored the medical implications of marital conflict and maladjustment. Too many physicians remain blissfully unaware of the marital problems of their patients until called upon to sew up the lacerations resulting from personal combat. They may then offer the fatherly suggestion that the couple should 'get along better' and return to have the stitches removed. Other physicians may wonder why peptic ulcer, or hypertension, or many other ailments are so re-

fractory to treatment in some patients and never realize that chronic marital tensions continue to aggravate the symptoms and counteract therapy. They may also accept the fact that their office visits include a high proportion of 'crocks' with multiple complaints and no detectable organic disease without suspecting that a proportion of these are casualties of the war between the sexes. Most physicians simply accept the depressing statistics on the rates of illegitimate pregnancies, forced marriages, and divorces as evidence of social problems, without considering that perhaps the medical profession has some obligation for prevention of such personal disasters. It seems safe to say that only the unusual physician has a real appreciation of the medical implications of marital and pre-marital problems and remains alert to recognize the etiologic and contributory effects of these on his practice."

Sigmund Freud wrote that dreams were the analyst's "royal road to the unconscious" of the patient. I believe that the trusting, faithful relationship between the practicing physician and his patient is a royal road to the deeper dynamics of the presenting problems. The privacy of the doctor's office may give the patient the freedom to unload his inner turmoil if he feels that the doctor will accept him if he does. As a counselor, the doctor should sensitively encourage the patient to share his problems as he feels able to do so. He must attempt to put the pieces together in a way that will throw light on the patient's total situation. It may be that some of the problems encountered are so complex and time consuming that the doctor will want to refer the patient to a professional marriage counselor or a trained pastoral counselor. If the doctor is in a large enough clinical setting, the hospital chaplain may be a helpful referral resource. Such referral is also a part of the counseling responsibility of the doctor.

One counseling problem the doctor may encounter with himself in trying to deal with the problems of his patients is authoritarianism and rigidity. Good counseling pro-

cedure may run counter to the way the doctor usually relates to his patients. There is no question about who makes the medical decisions in a hospital or doctor's office. This is the doctor's world and he rules supreme. However, it is one thing for a doctor to prescribe medication for an ailment. It is another thing for him to try to authoritatively prescribe a way of life or personal decisions for his patients. He has no authority to make his patient's decisions for them. Such authority is given to no counselor unless the counselee is incapable of making certain decisions for himself. Authoritarian solutions to personal problems not only violate respect for the patient, they also threaten the patient's trust in the doctor-counselor and inhibit personal growth. The doctor-counselor may map out alternatives with the patient, explore the possible decisions and their consequences, but this is one time in which the patient must write the final prescription and fill it himself. The doctor cannot do it for him. The doctor may have to discipline his ability to listen, especially when he has a tendency to do all the talking. His authority in counseling is gained not by virtue of his role or status, but by his willingness to listen, to understand and to guide with sensitivity and respect for the patient. Exceptions to this, of course, will come when the patient is a danger to himself or to others. In such cases the doctor has legal responsibility to take authoritative action.

It is not unusual for a counselor who likes to make quick decisions for himself to expect his client or patient to make his decisions quickly. When the solution to a problem looks so simple to the counselor, he may become impatient with the indecisiveness of the counselee and unconsciously try to force the counselee to accept his decision on the matter. I think my experience in a T. B. hospital gave me a medical analogy for this situation. One of the doctors in the hospital was explaining to me the way new drugs worked in the treatment of tuberculosis and how they were effective. He said that the drugs

do not destroy the T. B. germs and thereby rid the body of its problem. They, rather, have the effect of stopping or slowing the spread of the germs to allow the body a chance to gain strength and overcome the destructive force of the germs on its own. The drugs give the body a chance to solve its own problem. Now it seems to me that this is analogous to good counseling. The counselor, through his relationship, gives the counselee the needed support and guidance to keep him from being overcome by the spreading of his problem. However, it must be the person himself who finds his own solutions and actually solves his own problem. The counselor is an important part of this healing process, but he must respect the capacity of the individual to finally win out over the odds against him.

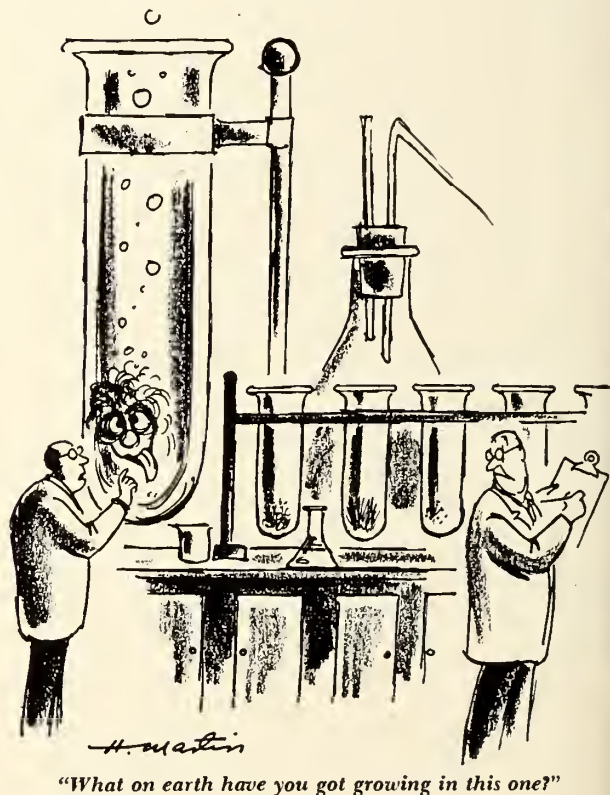
The use of these counseling principles in the professional relationship does not mean that the doctor becomes something other than a doctor to the patient. It simply means that any professional relationship, be it medical, psychological, legal, or pastoral, embodies the dynamics of effective counseling when the professional person is willing to take his relationships seriously. Since our business is that of the healing of persons, it is our responsibility to see to it that no resource is left untouched that will bring health and meaning into the life of those who come to us for assistance in the task of living.

In his book, *Understanding Your Patient*, Samuel Liebman says that, "While it is obvious that physicians never can become the superhuman genii that people would like them to be, they can do and are trying to do a better job of meeting the emotional needs of people." (p. 13) None of us are expected to perform miracles, but all of us are expected to be human and to identify ourselves with the humanity of others. All of the helping professions must avoid the danger of losing their basic human identity which is threatened by specialization and technology. All of us can do a better job of helping people when our training and knowledge is temper-

ed with empathic concern and respect for the total person.

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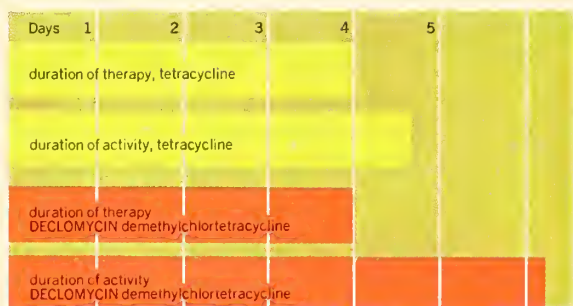
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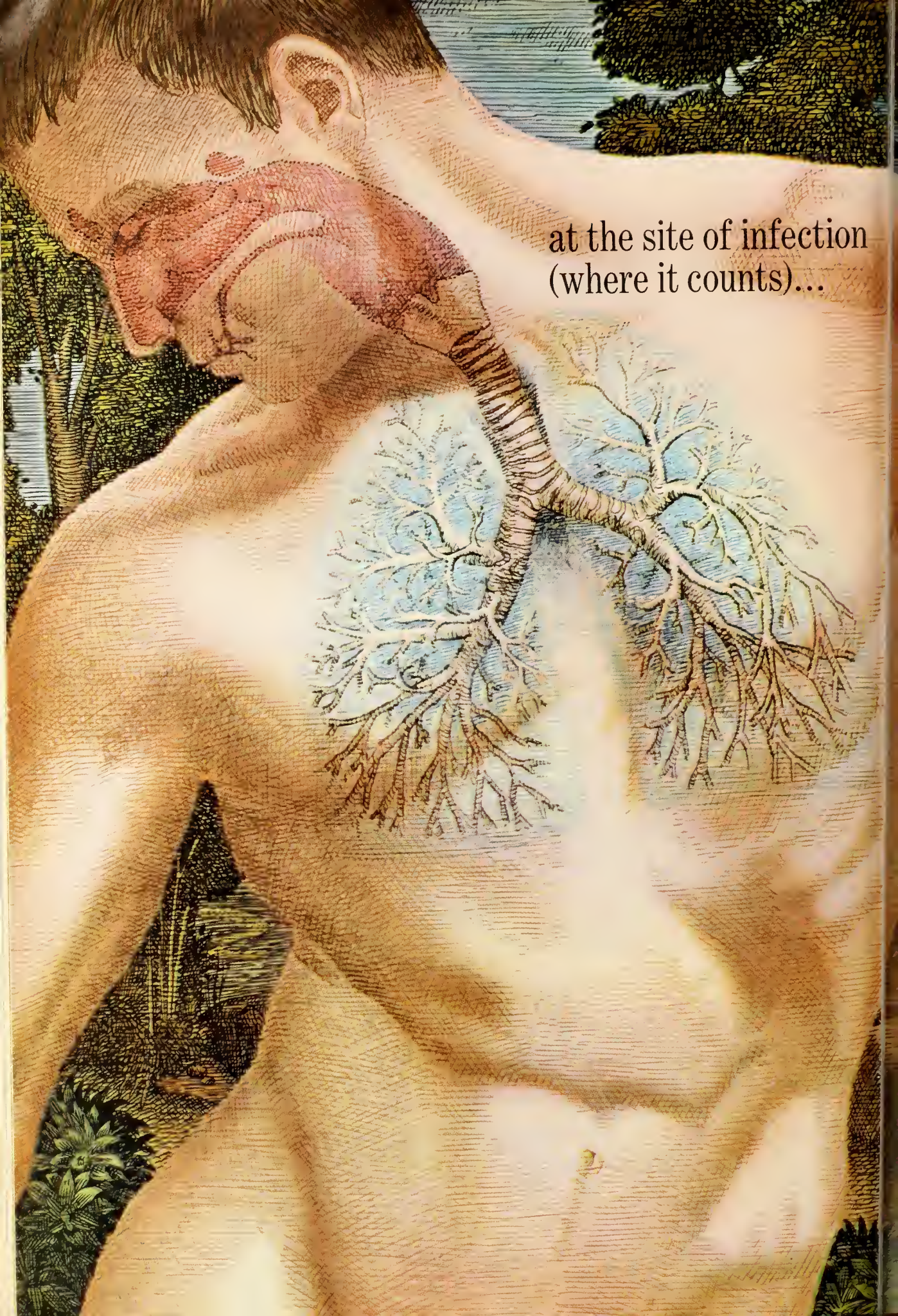
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Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone. **Contraindications:** Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to

be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalofluorescence and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholelithograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given 1 to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months for rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevations of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

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Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc. size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: *Am. J. M. Sc.*, 247:69, 1968. 2. Griffith, R. S., and Black, H. R.: *Antibiotics & Chemother.*, 12:398, 1968. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: *Am. J. M. Sc.*, 239:198, 1965.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

La

Congenital Anomalies in the Newborn Period

By Hugh B. Lynn, M. D.

Rochester, Minnesota

Congenital anomalies tend to fall into two obvious surgical categories: (1) emergency and (2) elective. However, with intelligent, prompt attention, many of these hazardous situations may be turned into elective operations instead of terrifying emergencies. Circumstances vary and a procedure that is elective in a large medical center may well constitute a near-tragic crisis in a rural facility. It is exactly for this reason that attention should be focused on early detection of every problem and quick preoperative preparation for handling it.

General Preoperative Measures

Even the most urgent surgical condition of the newborn will usually have a better outcome if orderly preparation is carried out before the patient is taken into the operating room. Most steps in preoperative preparation are well standardized but many are overlooked during the excitement of the moment. It is really not necessary to be absolutely certain of the diagnosis before starting treatment of the patient. All too frequently the condition of a tiny infant deteriorates under the eyes of the people most anxious to help, simply because nothing constructive actually gets done until laboratory documentation of the suspected diagnosis is at hand.

Nasogastric Suction Catheter.—Insertion of a nasogastric suction catheter is more likely

to save the infant's life than is any X-ray examination or antibiotic treatment. Decompression of the distended stomach will ease the respiratory efforts, improve ventilation, prevent vomiting, and delay further distention of the distal part of the bowel. In many cases it may make the diagnosis, as in esophageal atresia with or without tracheoesophageal fistula, or even in diaphragmatic hernia. The presence of the nasogastric catheter, even if suction is not available, produces some measure of relief and usually prevents anyone from attempting to feed the infant while waiting for reports on X-ray examination, blood tests, and other reports. A tube of the largest caliber that can be passed through the nostril should be selected and it must be shown to irrigate freely and function well before it is taped in place.

Incubator (Isolette) Environment.—New, efficient incubators can provide an atmosphere with accurate control of heat, humidity, and oxygen concentration. With the visibility afforded through a plastic hood and the ease of positioning and handling through the iris portholes, there is little reason to even examine an acutely ill infant outside this ideal environment. Use of clothing and diapers is unnecessary and even contraindicated, thus giving infinitely better conditions for prolonged observation than could be obtained in any crib or on any examining table. Elevation of the head or foot of the bed as desired is a simple maneuver. Familiarity with the nursing tricks of a good incubator makes the care of the infant much easier and certainly much better. It is possible to perform almost all tests and treatments within the incubator

Mayo Clinic and Mayo Foundation: Section of Pediatric Surgery.

Read at the meeting of the Alabama Chapter of the American Academy of General Practice, Birmingham, July 21 to 23, 1965.

and thus conserve the patient's resources. With the diagnosis in doubt, several changes in position may be tried before one is found that seems to ease breathing and heart action.

In premature infants the harmful effect that oxygen concentrations of more than 40 per cent have on the eyes is well established.

Venous Cutdown.—The standard cutdown technique should be known by every physician. Naturally a physician who deals with infants regularly will acquire more experience and facility; however, any physician should be able to establish an intravenous route when the situation demands. Although the operating surgeon is ultimately responsible for establishing a satisfactory intravenous "lifeline" before starting an operation, much time may be saved and the patient's condition improved or at least stabilized if this cutdown is done early. There is little reason to remove a patient from an incubator of the Isolette type for this procedure since it can easily be done within the incubator. In patients likely to require operation, it is foolish to spend time starting infusions in scalp veins or even hypodermoclysis.

Once the cutdown has been done, the administration of fluids (glucose solution, electrolyte solution, blood, and others) can be initiated. Although restoration of ideal fluid balance and electrolyte levels may tax even the most knowledgeable, cautious replacement by any intelligent physician can arrest and usually reverse the unfavorable trend. Five per cent glucose in 0.2 sodium chloride solution is a safe starting fluid. Skin turgor, moisture of the mucous membranes, urine output, and state of muscular activity and tone are all guideposts that are available long before the laboratory technician arrives to obtain the first samples.

Intestinal obstruction creates a special problem. Unfortunately, until the obstruction is relieved, a major portion of any solution administered, except blood or possibly plasma, seems to find its way into the distended

bowel or free peritoneal cavity. Thus, it is usually wise to proceed with operation and relieve the obstruction or resect the damaged bowel before optimal hydration is achieved.

Vitamins.—In all prematures and probably in all neonates, a small dose of vitamin K (2.5 mg given intramuscularly) is advisable. Any infant about to undergo an operation will profit from the addition of vitamin B complex and large amounts of vitamin C to the fluids for use.

There are probably no conditions in which the above recommendations would be contraindicated or less than helpful. Once these preparations have been made, there is time for X-ray examinations, blood studies, urine collection, cross matching of blood for transfusion, complete physical examination including a gentle rectal examination, and consultation.

Consultation.—A consultation is as close as the nearest telephone and may be quite rewarding. After this orderly preparation, very few important points will have been overlooked, but a discussion of the problem with someone more familiar with the anomaly will be reassuring and will help avoid oversights. In most cases a telephone consultation is all that is needed to complete preparations for operation.

When generalities are being discussed, as here, individual details and variations naturally are omitted or slighted.

Preoperative Measures in Particular Conditions

Omphalocele.—Among the anomalies of the newborn, omphalocele requires the most urgent treatment. Prompt operation, before the mucous membrane encasing the abdominal viscera has the opportunity to dry out, crack, and rupture, or permit bacteria to enter the peritoneal cavity, is imperative. In addition to the procedures outlined above, the only justifiable preoperative treatment is the application of hexachlorophene (pHisoHex)-soaked gauze to the entire omphalocele.

Diaphragmatic Hernia. — Diaphragmatic hernia is a major emergency in infancy. Unfortunately it is rarely if ever detected before respiratory difficulties develop. Tension produced in the hemithorax by the distended bowel leads to compression of the lungs, shift of the labile mediastinum, vomiting, and possibly aspiration of material. At this point, insertion of the nasogastric tube may be a life-saving measure. In cases of large left-sided pleuroperitoneal defects, the stomach itself may be inverted and kinked in the left hemithorax. This situation often makes passage of the suction tube difficult and sometimes impossible. In one instance the author was forced to aspirate the stomach with a thoracentesis needle as an emergency measure to restore adequate ventilation and circulation in a moribund infant.

Once the suction catheter is functioning satisfactorily, preparation and study of the patient may proceed as outlined. Although the emergency has been relieved temporarily, the condition still remains an urgent surgical problem.

Intestinal Obstruction.—Although omphalocele and diaphragmatic hernias have elements of intestinal obstruction owing to primary compression, twisting, and the often associated incomplete rotation of the midgut, they usually constitute prime emergencies for other reasons.

Intestinal obstruction may be due also to atresia, stenosis, incomplete rotation, volvulus,

imperforate anus, or other causes. The emergency nature of all these conditions becomes more urgent as distention increases. The impairment of respiratory exchange is obvious and can be detected and the exchange supported. Vomiting can be prevented. However, the actual state of viability of the overdistended bowel can be evaluated only at operation. Gangrenous infarction with perforation is easily understood, but the small leaks that appear on the antimesenteric border of overdistended intestine are more difficult to understand and more difficult to detect at the operating table. The only possible way of preventing this occurrence is by adequate preparation and prompt operation.

While the newborn infant can tolerate extensive surgical procedures, he must be adequately prepared and supported. This preparation should start with the first physician who sees the infant.

Summary

Basic steps universally acceptable in the preparation of an infant for emergency operation include insertion of a nasogastric suction catheter, provision of an efficient incubator environment, early venous cutdown, administration of vitamins K, B complex, and C, and preoperative consultation. These steps are essential no matter what the diagnosis. Preparation for operation can be and should be started long before the diagnostic work-up is conclusive.

Aspirin Anniversary . . .

The first common "wonder" drug is 113 years old this year. A bottle of the little white tablets may be found in anybody's medicine cabinet. Larger bottles will be found in the homes of sufferers of arthritis for it is the most widely used drug for relief of pain and reduction of inflammation caused by this disease. It is a relatively inexpensive drug which has almost no side effects and,

fortunately, most patients have a high tolerance for it.

Aspirin's first use as a pain killer was discovered in connection with arthritis. Felix Hoffmann, a young German chemist, tried it on his father's arthritis, having first experimented with it on animals and on himself. It helped and Hoffmann named it aspirin because its raw material, which comes from the spirea plant, is called spirin.

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"A steroid-nutritional compound (Mediatrix) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging ... This therapy resulted in improvement of 75 per cent of the patients ..."

McNeill, A. J.: Clin. Med. 8:518 (Mar.) 1961.

"Mediatrix (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics 12:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

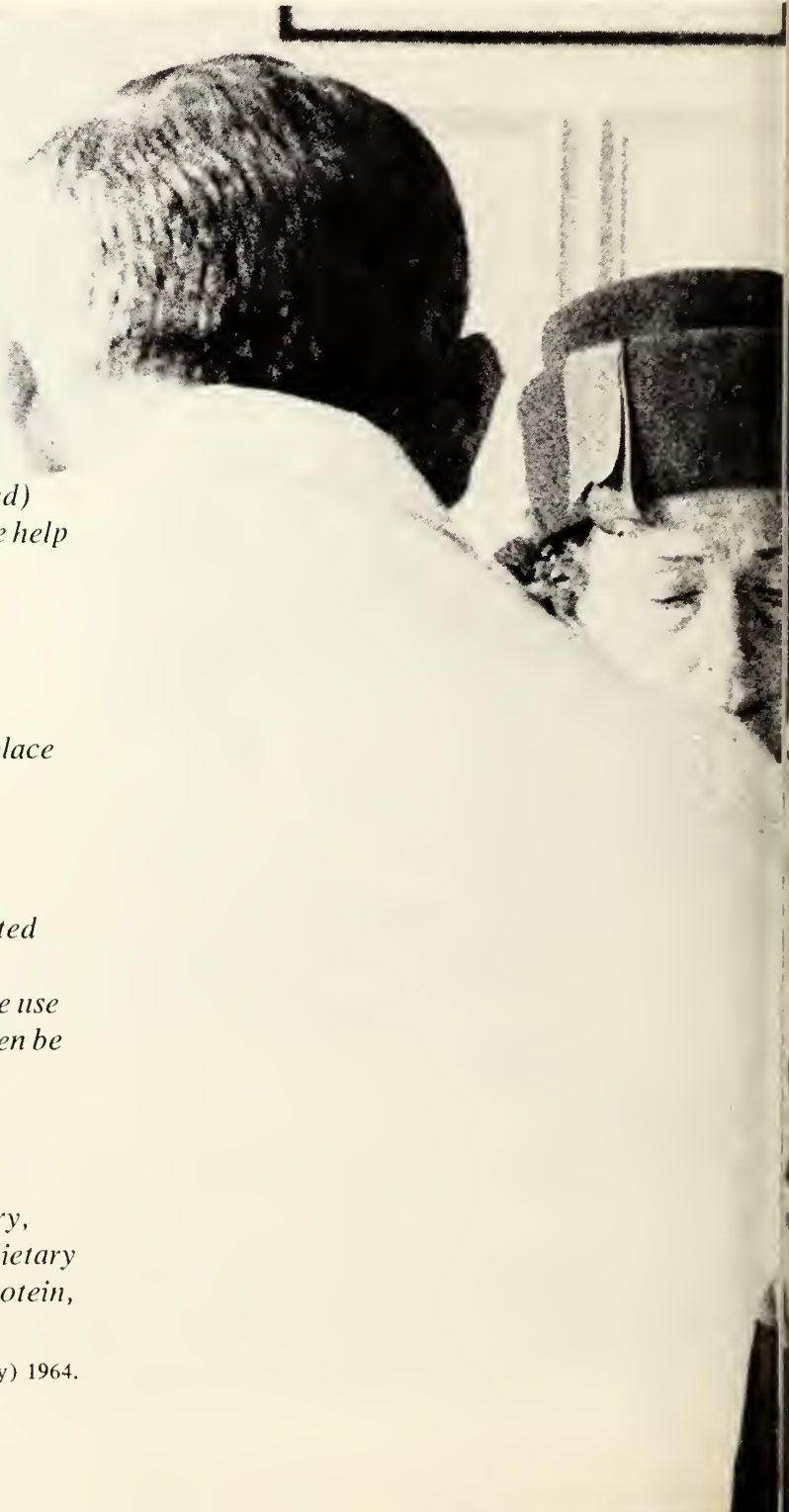
Morgan, A. E.: Gerontologist 2:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied ... The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. E.: Gerontologist 2:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. 12:489 (May) 1964.



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Nutritional reinforcement for those who can't
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Conjugated estrogens—equine (Premarin®)	0.25 mg.
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In the female: To avoid continuous stimulation of breast and
uterus, cyclic therapy is recommended (3 week regimen with
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In the male: A careful check should be made on the status
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Nausea & vomiting	●		●
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Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
Surgery	●	●	●
Tetanus	●	●	

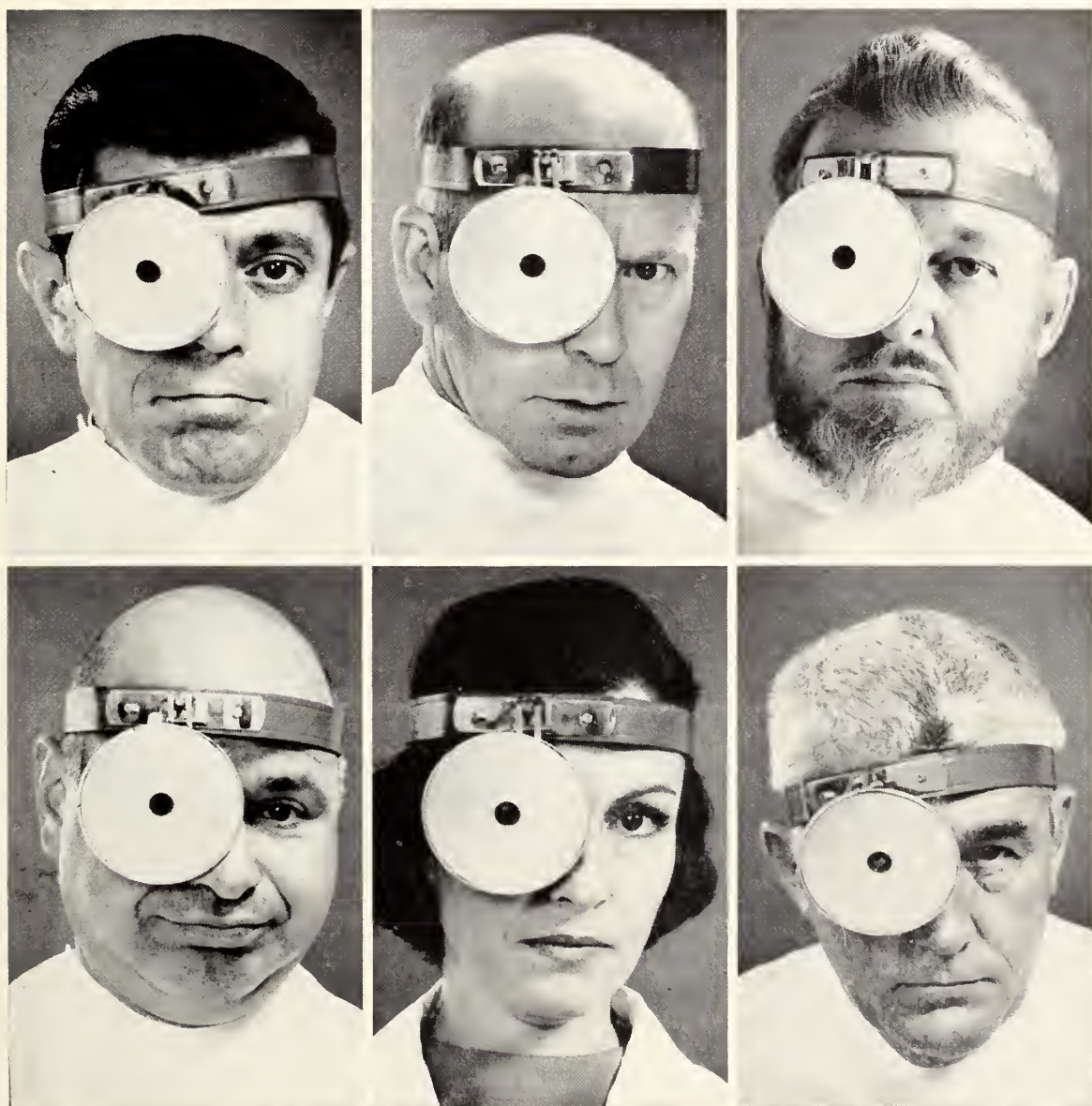
'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. **Contraindications:** Comatose states or the presence of large amounts of C.N.S. depressants. **Precautions:** Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. **Side Effects:** Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with

I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories 



"All Otolaryngologists are Alike"

Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

Wrong! But that's no more preposterous than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more exacting. In fact, there are at least nine *specific differences* involving moisture content, purity, potency and speed of tablet disintegra-

tion, which make the manufacture of Bayer® Aspirin so different.

These Bayer standards result in significant product benefits, including gentleness to the stomach and product stability, that enable Bayer Aspirin tablets to stay strong and gentle until they are taken.

So next time you hear someone say that *all* aspirin tablets are alike, you can say, with confidence, that "it just isn't so."

You might also say that all otolaryngologists aren't alike, either.



Medicine and Religion Symposium

A symposium on medicine and religion will be held at the UNC School of Medicine in Chapel Hill on June 11, 12, and 13, 1967. Title of the program will be "The Physician, the Clergy and the Whole Man." Physicians and clergymen are invited to participate in this occasion, which is sponsored by the Committee on Medicine and Religion of the State Medical Society, the Department of Medicine and Religion of the American Medical Association, and the University of North Carolina School of Medicine.

Nationally distinguished speakers will discuss a number of areas in which physicians and clergymen have mutual interests and responsibilities with regard to patients and their families, including alcoholism, extension of life, psychiatry and religion and terminal illness and grief. Part of the program will be devoted to small group discussions of these and other topics.

It is hoped that "teams" of physicians and clergymen from the same community may attend. Detailed programs and information regarding registration and housing can be obtained from UNC, Chapel Hill.

Lederle Grants Renewed By American Geriatrics Society

Three \$1,800 grants to encourage resident physicians to devote more time to the study of medical problems of the aging have been renewed by the American Geriatrics Society.

The grants—inaugurated by Lederle Laboratories in 1962—will supplement the salaries the physicians receive. They will cover the period between July 1967 to June 1968.

In announcing the grants, Dr. Edward J. Lorenze, president of the American Geriatrics Society, said that much more research is needed if we are effectively to meet the problems posed by an increasing number of aged in our population. He noted that by 1970 there will be 20 million Americans 65

or older.

Lederle's Medical Director, Dr. Benjamin W. Carey, said that a great deal of basic research is needed to give us more understanding of what happens in growing tissues, what makes us age, and to what extent we can actually prevent the manifestations of aging.

Application for the grants should be addressed to the Chairman, Fellowship Committee, American Geriatrics Society, 10 Columbus Circle, New York, N. Y. 10019. Deadline for applications is June 1, 1967. Announcement of the awardees will be made at the AGS annual meeting June 16-17 at Atlantic City.

Health and Safety Tips from the American Medical Association

Although no single factor will prevent heart disease, says a pamphlet of the American Medical Association, good health habits are as favorable to the heart and circulatory system as they are to all body functions.

If you already have some form of heart disease, suitable medical management and good living habits will prolong life and make it more enjoyable.

Here are some suggestions from the American Medical Association for healthful living—

- Understand heart disease. Don't fear it.
- Learn your health status by periodic medical examinations.
- Reduce weight if obese: Eat less in the hope you will live longer to eat more.
- Don't experiment with special diets. If your physician thinks you need one, he will prescribe it.
- Exercise regularly. If you have heart trouble your physician will set your activity limits.
- Prevent infectious diseases. If one should occur, seek treatment promptly.
- Accept life's challenges, come to terms with the inevitable, and live as though you will live forever.

P r o g r a m
of the
106th ANNUAL SESSION
of the
MEDICAL ASSOCIATION OF THE STATE OF ALABAMA
MONTGOMERY :—: JEFFERSON DAVIS HOTEL
APRIL 20, 21, 22, 1967

The 106th Annual Session of the Medical Association of the State of Alabama will be held April 20-22 at Montgomery.

The theme of this Session's Scientific Program centers around "Heart Disease, Cancer and Stroke," in recognition of the creation within this state of a regional center to further research into the most perplexing medical problems of this time.

The Association is indebted to Drs. T. Joseph Reeves, Walter B. Frommeyer, Jr., and J. Garber Galbraith for their tireless efforts in making this one of the most constructive Sessions in its history.

All scientific and business sessions will be held at the Jefferson Davis Hotel in downtown Montgomery, Alabama.

Registration

The registration desk will be located in the lobby of the Jefferson Davis Hotel. Counsellors and delegates will be registered in advance and may pick up their badges and other essential material upon signing the official registration card. Members and guests will be registered during the following hours: 8:00 a. m. to 5:00 p. m., on Thursday and Friday, April 20 and 21, and from 7:30 a. m. until 10:00 a. m., on Saturday, April 22.

Exhibitors Registration

The registration desk for exhibitors will be

located in the lobby of the Jefferson Davis Hotel and will be open from 2 p. m. until 5 p. m., on Wednesday, April 19.

Badges

Badges must be worn to all scientific, business, and social sessions. No one will be admitted into the exhibit area unless he wears an official badge.

Speakers

Speakers will be called in the order in which they appear on the program. Should a speaker be absent when called, his paper will be passed and called again upon conclusion of the program.

Hotel Reservations

The Central Office of the Medical Association of the State of Alabama has established a Housing Bureau for the convenience of counsellors, delegates, and members.

Advance registration requests have been distributed in the *Handbook for Counsellors and Delegates* and in programs mailed to the several specialty groups. Advance reservations may be made prior to April 15, 1967. After that date reservations must be made directly with the hotel or motel.

Social Events

Many social events will be sponsored dur-

ing the Annual Session by specialty groups, alumni organizations, and the Montgomery County Medical Society. The Scroll and Key Club reception and dinner will be held in the Ball Room of the Jefferson Davis Hotel on Friday evening. Tickets for social events, if not purchased in advance, will be available at the registration desk.

Awards

Five awards will be presented immediately following the scientific program at 11 a. m., on Friday. They are:

The William L. Sanders Award, made annually to an outstanding person, lay or professional, engaged full time in public health work; but who has performed above and beyond the call of duty. The award consists of a plaque and prize in the amount of \$100.

The William Crawford Gorgas Award, made to a citizen of Alabama who is not actively engaged full time in the field of health and who has rendered outstanding service in the health field. Persons holding the degree of "doctor of medicine" are not eligible for this award. The award consists of an engraved plaque.

The Douglas L. Cannon Medical Reporting Award, made annually to the reporter, editor, or publisher of an Alabama newspaper, or to a radio or television personality, who has shown excellence in factual reporting of medical news and for outstanding efforts in elevating medical news covering. The award consists of an engraved plaque.

The Aesculapius Award, an inscribed certificate plus a \$200 cash prize donated by the Medical Association of the State of Alabama in cooperation with Mead Johnson Laboratories to the author of the outstanding scientific exhibit shown at the 1967 Annual Session.

The Physician Award for community service, sponsored by A. H. Robins Company, Inc., will be presented to an Alabama physician who has performed outstanding com-

munity service, outside the medical field during the past year. The award consists of a bronze medallion on a mahogany plaque and symbolizes the close relationship between medicine and the local community.

Board of Trustees

The Board of Trustees will meet at 9 a. m., Wednesday, April 19, at the Association Building, 19 South Jackson Street, Montgomery, to sit as a reference committee on any and all matters of business to be presented at this session. Members are welcome to meet with the Board of Trustees and to present their views on current topics related to the practice of medicine.

Board of Censors

The Board of Censors will meet at 9 a. m., Wednesday, April 19, at the Association Building, 19 South Jackson Street, Montgomery. Any member desiring to attend this meeting, either to be heard on any issue or as a spectator, will be welcome.

Other Events

Wednesday, April 19, 1967

Exhibitors Party

Reception for Exhibitors—Jefferson Davis Hotel—Senate Room—4:00 P. M. to 5:00 P. M.

Alabama Thoracic Society and Alabama Tuberculosis Association

All physicians are invited to attend a reception and dinner beginning at 6:00 P. M., at the Jefferson Davis Hotel. Speakers for the evening will be James H. Sterner, M. D., Medical Director of Eastman Kodak Co., who will discuss air pollution; and Herbert A. Saltzman, M. D., Assistant Professor, Duke University whose subject will be "Rational Clinical Use of Oxygen in Treatment of Patients."

Alabama Chapter American Academy of General Practice

The Board of Directors of the Alabama Chapter American Academy of General Prac-

ANNUAL SESSION PROGRAM

tice will meet at 6:30 P. M., in the Oak Room at the Jefferson Davis Hotel.

Wednesday, April 19, 1967

State Anesthesiologists Society

The State Anesthesiologists Society will have a reception at 7:00 P. M., and Dinner at 8:00 P. M., at the Whitley Hotel. Featured speaker for the evening will be Paul Mertins, Jr., M. D., whose topic will be "Mistakes in Endoscopy."

Thursday, April 20, 1967

Past Presidents and Fifty Year Club

A luncheon honoring Past Presidents and old and new members of the Fifty Year Club will be given by the Medical Association at the Jefferson Davis Hotel in the Senate Room at 12:30 P. M.

ALUMNI MEETINGS

Tulane Alumni

The Tulane Alumni will provide an evening of enjoyment for its members beginning with a social hour at 6:30 P. M., followed by a dinner at 8:00 P. M., at the Jefferson Davis Hotel in the Senate Room.

Alumni Association, Medical College of Alabama

The Alumni Association, Medical College of Alabama will have a reception at 6:30 P. M., and dinner at 8:00 P. M., at the Montgomery Country Club. Featured speaker for the evening will be Harold T. Dodge, M. D., Director, Cardiology Department of Medicine. Installation of new officers will be made at the dinner.

Vanderbilt Alumni

The Vanderbilt Alumni will have a reception at 6:30 P. M., and a dinner at 8:00 P. M., at the Jefferson Davis Hotel in the Senate Room.

Evening of Entertainment

The Montgomery County Medical Society will be hosts at an "Evening of Entertainment" at the Jefferson Davis Hotel in the Ballroom. Tickets will be available at the Registration Desk. Social Hour 7:00 P. M., Dinner, 8:00 P. M., Dance 9:00 P. M.

Friday, April 21, 1967

International College of Surgeons

The International College of Surgeons will have a breakfast at 7:30 A. M., at the Jefferson Davis Hotel in the Senate Room, Third Floor.

ALAPAC Luncheon

The Alabama Political Action Committee will sponsor a luncheon at the Jefferson Davis Hotel in the Ballroom at 12:30 P. M. Guest speaker will be the Honorable Lurleen B. Wallace, Governor of the State of Alabama. Tickets will be available in the lobby of the Jefferson Davis Hotel.

Scroll and Key Club

The Scroll and Key Club will entertain at the Jefferson Davis Hotel. Social Hour at 7:00 P. M., in the Civic Room; dinner at 8:00 P. M., and dance at 9:00 P. M., in the Ballroom.

Saturday, April 22, 1967

Alabama Academy of Ophthalmology and Otolaryngology

The Alabama Academy of Ophthalmology and Otolaryngology will have a social hour at 6:30 P. M.; dinner at 7:30 P. M., at the Jefferson Davis Hotel in the Civic Room. Featured speaker will be Ed Holman, Director, Department of Medical Ethics, American Medical Association. A business meeting will immediately follow the dinner. Bridge tables will be provided for the ladies following the dinner.

ANNUAL SESSION PROGRAM

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Alternate—W. E. White Anniston (Term: January 1, 1967-December 31, 1968)

Delegate—M. Vaun Adams Mobile

Alternate—J. Michaelson _____ Foley
(Term: January 1, 1966-December 31, 1967)

Delegate—John M. Chenault _____ Decatur

Alternate—William L. Smith _____ Montgomery
(Term: January 1, 1966-December 31, 1967)

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Fifty Year Club

As in past years, members of the Association who have practiced medicine for fifty years will be presented Certificates on Friday morning, April 21, immediately preceding the Jerome Cochran Lecture. The Presi-

dent of the Association will be host to members and members-elect of the Fifty Year Club and to all past presidents at a luncheon at 12:30 p. m., Thursday, April 20, 1967, in the Senate Room of the Jefferson Davis Hotel.

New members of the Fifty Year Club are:

John Coleman Bragg	Decatur
Frank Hartman Clements	Birmingham
John Decatur Durden	Anniston
William Francis Gessler	Fairhope
Ralph Moseley Kimbrough	Powderly
John Paul Jones	Camden
Frank White McCorkle	Gadsden
John Ralph Morgan	Birmingham
Joseph Flournoy Rowe	Mobile
Charles Henry Savage	Prichard
Emmett Clarence Siniard	Birmingham
Benjamin Franklin Thomas	Auburn

PROGRAM

Thursday, April 20, 1967



Dr. Finney

J. O. Finney, M. D., Gadsden,
President, Presiding

9:00 A. M.

Call to Order

Invocation

9:05 A. M.

Welcome Addresses

Mayor, Honorable Earl James
President Montgomery County Medical
Society, William F. Reynolds, M. D.

Orientation



Dr. Robinson

E. Bryce Robinson, Jr., M. D.,
Fairfield,

President-elect, Presiding

9:15 A. M.

County Medical Society Organization and
Activities, William L. Smith, M. D., Mont-
gomery

9:25 A. M.

State Board of Censors, Robert Parker, M. D.,
Montgomery

9:30 A. M.

Medicine and Religion, The Rev. Dr. Paul B.
McCleave, Director, Department of Medi-
cine and Religion, American Medical Asso-
ciation, Chicago, Illinois

10:05 A. M.

BREAK—VIEW EXHIBITS

10:20 A. M.

State Board of Health and County Affiliates,
Ira L. Myers, M. D., State Health Officer,
Montgomery

10:30 A. M.

Medical Ethics, J. Garber Galbraith, M. D.,
Birmingham

10:40 A. M.

AMPAC and ALAPAC, E. B. Glenn, M. D.,
Birmingham

10:50 A. M.

The Medical College of Alabama, Present and
Future, Dean S. Richardson Hill, M. D.,
Birmingham

11:00 A. M.

Narcotics, Regulation and Controls and Their
Abuse, Mr. Ernest Gentry, Assistant Com-
missioner, U. S. Bureau of Narcotics, Wash-
ington, D. C.

11:30 A. M.

Woman's Auxiliary, Mrs. Ira B. Patton, One-
onta, President WAMASA

11:45 A. M.

President's Message, J. O. Finney, M. D.,
Gadsden

Scientific Program

HEART

Thursday, April 20



T. Joseph Reeves, M. D.,
Professor of Medicine,
Medical College of Alabama,
Birmingham, Presiding

2:00-2:40 P. M.

Recent Developments in Cardio-
vascular Research, Harold T.
Dodge, M. D., Professor of
Medicine and Director of Di-
vision of Cardiology, Medical
College of Alabama, Birming-
ham



2:40-3:20 P. M.

The Diagnosis of Correctable
Causes of Hypertension,
Cooper Hazelrig, M. D., Chief
Resident Associate, Mayo
Clinic, Rochester, Minnesota



3:30-3:40 P. M.

Break—View Exhibits

3:40-4:20 P. M.

The Challenge of Coronary In-
tensive Care Units, Bernard
Lown, M. D., Assistant Profes-
sor of Medicine, Harvard
School of Public Health; Di-
rector, Samuel A. Levine Car-
diac Center, Peter Bent Brigh-
ham Hospital, Boston, Mass-
achusetts



4:20-5:00 P. M.

Surgery for Coronary Artery
Disease, W. Sterling Edwards,
M. D., Professor of Surgery,
Medical College of Alabama,
Birmingham



Thursday, April 20

Evening of Entertainment

The Montgomery County Medical Society will be hosts at an "Evening of Entertainment" at the Jefferson Davis Hotel in the Ballroom. Tickets will be available at the Registration Desk. Social Hour 7:00 P. M., Dinner, 8:00 P. M., Dance 9:00 P. M.

Scientific Program

CANCER

Friday, April 21

Civic Room



Walter B. Frommeyer, Jr., M. D., Professor and Chairman, Department of Medicine, Medical College of Alabama, Presiding

9:00-9:30 A. M.



Management of Multiple Myeloma and Malignant Lymphoma, William J. Hammack, M. D., Director, Division of Hematology, Medical College of Alabama, Birmingham

9:30-10:00 A. M.



Combination in Chemotherapy in Leukemia, Paul Carbone, M. D., National Cancer Institute, National Institutes of Health, Bethesda, Maryland.

10:00-10:30 A. M.



Mycoplasma and the Etiology of Cancer: A Look to the Future, James T. Grace, M. D., Assistant Director, Roswell Park Memorial Institute, Director, Viral Oncology Section, Buffalo, New York

10:30-10:45 A. M.

Summary Remarks—Walter B. Frommeyer, Jr., M. D., Professor and Chairman, De-

partment of Medicine, Medical College of Alabama, Birmingham

10:45 A. M.

Break—View Exhibits

Friday, April 21, 1967

11:15 A. M.



JEROME COCHRAN LECTURE

Progress of Regional Medical Program, Robert Q. Marston, M. D., Associate Director, National Institute of Health, Bethesda, Maryland



AWARDS

William Henry Sanders Award

Otis F. Gay, M. D., P. H. Huntsville



Douglas L. Cannon Award

Howell H. Raines, Documentary Director, WBRC TV, Birmingham



William Crawford Gorgas Award

Ed Leigh McMillan, Attorney Brewton

Scientific Program

STROKE

Friday, April 21

Civic Room



J. Garber Galbraith, M. D., Professor and Chairman, Department of Neurosurgery, Medical College of Alabama, Birmingham Presiding

2:00 P. M.

Panel Discussion on Regional Medical Programs, Moderator: J. Garber Galbraith, M. D.; Participants: Robert Q. Mars-

ANNUAL SESSION PROGRAM

ton, M. D., S. Richardson Hill, M. D., J. O. Finney, M. D., Walter B. Frommeyer, Jr., M. D., and T. Joseph Reeves, M. D.

2:45-3:05 P. M.



Diagnosis and Medical Management of Stroke, James H. Halsey, M. D., Assistant Professor of Neurology, University of Alabama Medical Center, Birmingham

3:05-3:25 P. M.



Newer Techniques of Arteriography in Diagnosis of Stroke, Alvaro Ronderos, M. D., Associate Professor, Department of Radiology, University Hospital, Birmingham

3:25 P. M.

Break—View Exhibits

3:45-4:15 P. M.



A Ten Year Experience in the Surgical Treatment of Stroke, Holt A. McDowell, M. D., Assistant Professor of Surgery and J. Garber Galbraith, M. D., Professor and Chairman, Department of Neurosurgery, Medical College of Alabama, Birmingham

4:15-5:00 P. M.

Panel on Stroke: Diagnosis and Treatment

Moderator: J. Garber Galbraith, M. D.

Panelists: James H. Halsey, M. D., Alvaro Ronderos, M. D., Holt A. McDowell, M. D.

Friday, April 21

Scroll and Key Club

The Scroll and Key Club will entertain at the Jefferson Davis Hotel. Social Hour at

7:00 P. M., in the Civic Room; dinner at 8:00 P. M., and dance at 9:00 P. M., in the Ballroom.

Saturday, April 22

J. O. Finney, M. D., President, Presiding Business Meeting of the Association sitting as the Board of Health of the State of Alabama.

(1) Report of the Board of Censors

(2) Revision of the Rolls

(a) County Societies;

(b) Counsellors;

(c) Correspondents;

(3) Election and Installation of Officers

(4) Presentation of Past President's Plaque

ADJOURNMENT

Commercial Exhibits

Exhibitor	Booth Number
Abbott Laboratories	1
Roche Laboratories	2
Mutual of Omaha	3
Carnation Company	4
Unimed, Inc.	5
	6
Astra Pharmaceutical Products, Inc. ..	7
United Medical Laboratories, Inc.	8
	9
Bristol Laboratories	10
Coca Cola Bottlers of Alabama	11
Lakeside Laboratories	12
Automated Management Systems	13
	14
	15
	16
Wampole Laboratories	17
Blue Cross-Blue Shield of Alabama	18
Bentex Pharmaceutical Company	19
Durr Surgical Supply Company	20-21
Lederle Laboratories	22
First Alabama Securities, Inc.	23
U. S. Vitamin & Pharmaceutical Corporation	24

ANNUAL SESSION PROGRAM

Medac Division, First National Bank	25
	26
	27
	28
Breon Laboratories, Inc.	29
Pfizer Laboratories	30
Eli Lilly and Company	31
The Upjohn Company	32
X-Ray Service and Sales Company	33
Smith, Miller and Patch, Inc.	34
	35
	36
	37
Mallinckrodt Pharmaceuticals	38
Americana Corporation	39
A. H. Robins Company	40
General Surgical Supply Company	41
Parke, Davis and Company	42
Schering Corporation	43
Medical Specialties Corporation	44
Warren-Teed Pharmaceuticals, Inc.	45
Warner-Chilcott Laboratories	46
McNeil Laboratories, Inc.	47
Ciba Pharmaceutical Company	48
Sandoz Pharmaceuticals	49
Birmingham Limb and Brace Co.	50
Merck Sharp and Dohme	51
Manpower	52
Jay Johnson Business Machines	53
William P. Poythress and Co., Inc.	54
Reid-Provident Laboratories	55
Hill Crest Hospital	56
G. D. Searle and Company	57
Bedsole Surgical Supply Company	58
Mead Johnson Laboratories	59
Barber Milk Company	60
Diners Club	61

PROGRAM SUMMARY

Wednesday, April 19

- 9:00 a. m. Board of Trustees****
Board of Censors****
- 12:00 noon Alabama Orthopedic Society
- 12:30 p. m. Censors and Trustees Lunch***
- 1:30 p. m. Alabama Chapter American
Academy of Pediatrics*
- 4:00 p. m. Exhibitors Meeting*
- 6:00 p. m. Alabama Thoracic Society*

- 6:30 p. m. Alabama Academy of Neurology
and Psychiatry*
- 7:00 p. m. Anesthesiologist Reception
and Dinner**
Board of Censors Dinner†

Thursday, April 20

- 9:00 a. m. Opening Session*
Orientation Program*
- 11:45 a. m. President's Message*
- 12:30 p. m. Past Presidents, Fifty Year
Club members, Luncheon*
Radiologist Luncheon*
- 2:00 p. m. Scientific Program*
- 6:30 p. m. Tulane Alumni Reception
and Dinner*
University of Alabama Alumni
Reception and Dinner†
Vanderbilt Alumni Reception
and Dinner*
- 7:00 p. m. Reception, Dinner and Dance,
Montgomery County Medical
Society Host*

Friday, April 21

- 7:30 a. m. International College of
Surgeons Breakfast*
- 9:00 a. m. Scientific Program*
- 10:30 a. m. Awards Presentation*
- 11:15 a. m. Jerome Cochran Lecture*
- 12:00 noon Caucus on Counsellors*
- 12:30 p. m. ALAPAC Luncheon*
- 2:00 p. m. Scientific Program*
- 7:00 p. m. Scroll and Key Club
Reception, Dinner and Dance*

Saturday, April 22

- 9:00 a. m. Business Session*
- 6:30 p. m. Alabama Chapter, American
Academy of Ophthalmology and
Otolaryngology, Reception and
Dinner*

*Jefferson Davis Hotel

**Whitley Hotel

***Holiday Inn Midtown

****Medical Association Bldg.

†Montgomery Country Club



Alabama Department of Public Health



"ENVIRONMENTAL POLLUTION PROBLEMS IN ALABAMA— WATER AND AIR"

By Ira L. Myers, M. D.

Montgomery, Alabama

Man's curious nature has carried him all over the face of this globe to chart the unexplored. The lands identified—and the polar ice caps charted and the mountain peaks scaled, he ventures into other extremes of his environment. On the one hand, he descends into the depths of the earth's waters and burrows deeper into the crust and seeks to explore the center of the earth by project mohole. Here we are plagued with extreme pressures and temperatures.

On the other extreme and in the opposite dimension, we explore space. We are concerned with bioastronautics, or the study of the effects of the hostile environment of space on living organisms. Here we have a vacuum, or nearly so. Again we have extremes of temperatures.

For those of us who are earth bound surface dwellers, we, too, are concerned about taming our hostile environment.

Man is restless to move to the next challenge when one need is satisfied. Those who struggle against poverty, hunger and thirst seem little concerned about water pollution or air pollution; but the affluent society, hav-

ing progressed in attaining basic needs of food, shelter and clothing, turns to the preservation of his heritage and looks to the future. This is the mark of civilization. The cumulative effects of man's waste products seem to grow geometrically in proportion to prosperity. Man was born in a hostile environment and has created a hostile environment by his use of water, air, and land. Pollution by man and how he conquers it may determine his future existence.

Water pollution control has been given a top priority consideration, and as we progress we begin to take steps to correct air pollution and solid waste or garbage accumulation.

A powerful influence on the pollution control movement was the interest in the long range effects of radiation from the use of nuclear energy.

In underdeveloped countries where human excreta and sewage is cast on the surface soil, the pollution is much less evident in the streams. Yet, civilized man desires water in quantity and once used, then he faces the waste water problem we call water pollution.

When we pollute our streams, lakes and ponds, we destroy about three per cent of the world's fresh water supply; but when we pollute our atmosphere, we have only one.

(Continued on Page 1251)

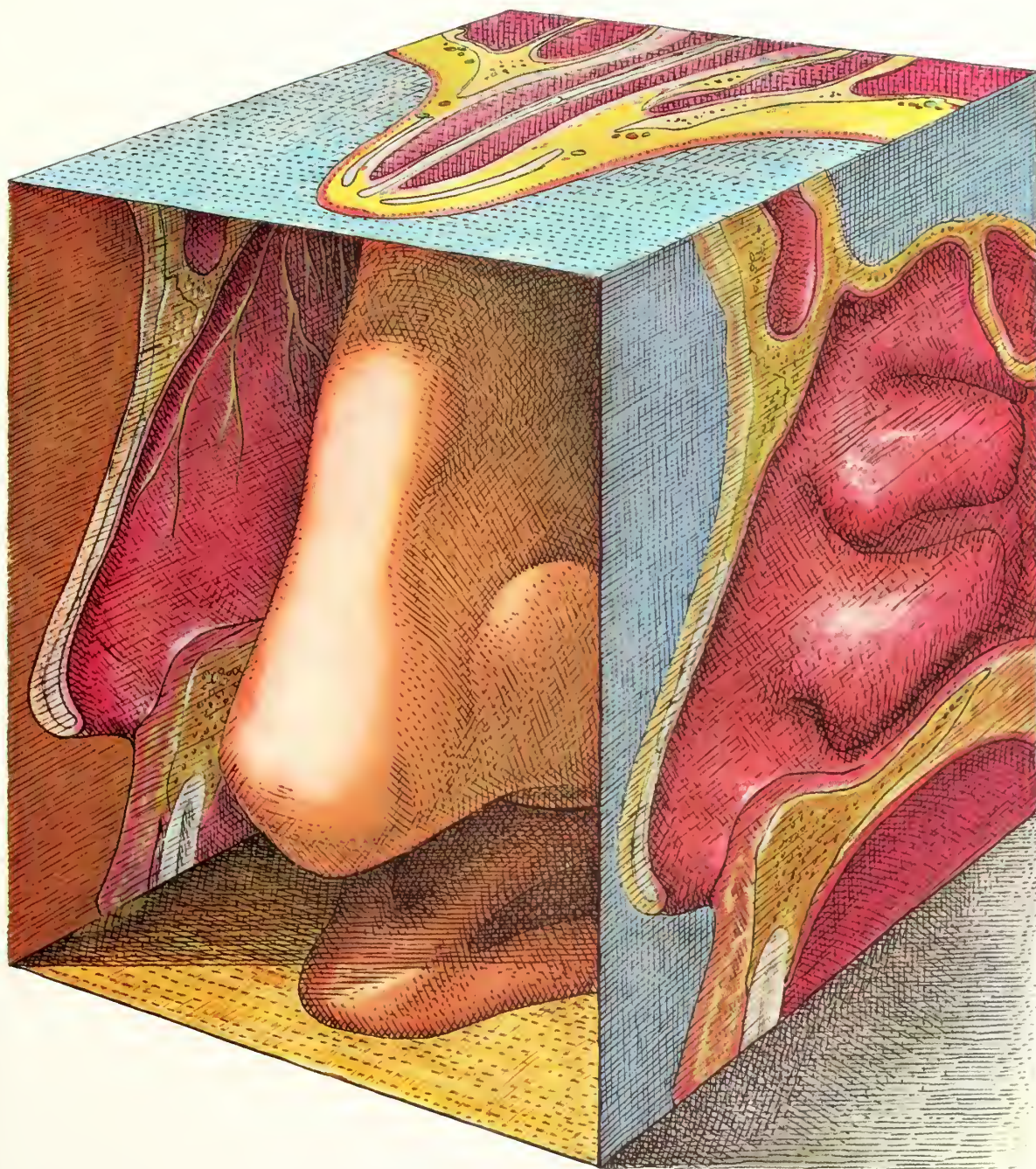
Presented by Ira L. Myers, M. D., State Health Officer, at Annual meeting of the State Chamber of Commerce, November 17, 1966, Parliament House, Birmingham.

DORSEY

Spring 1967

Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.



this issue: the ubiquitous world of



summer allergies



the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.¹ The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

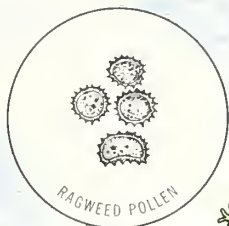
Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.² The entire tree season starts about April 1 and ends about Memorial Day, al-

though all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.³ Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.⁴

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is *Alternaria*—the kingpin of the molds—that meets a sudden demise with the first frost. *Alternaria*-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, *Alternaria* counts are at their highest, perhaps associated with the burning of leaves. Other molds such as *Hormodendrum* and

Helminthosporium are associated with the warmer weather, as opposed to *Penicillium* and *Aspergillus* which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.⁵ Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.⁶ Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

to relieve



summer allergies

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.⁷ Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.⁸ It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

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2. Samter, M.: Immunological diseases. Little, Brown and Co. p. 513, 1965.
3. Wodehouse, R. P.: Antigenic analysis by gel diffusions: 2. Grass pollen. *Int. Arch. Allerg.* 6:65, 1955.
4. Cohart, E. M., and Kandle, R. P.: The Effects of a ragweed control program on ragweed pollen counts, *J. Allergy* 30:287, 1959.
5. Woddell, L. S.: Egyptian civilization: Its origin and real chronology and Sumerian origin of Egyptian hieroglyphics. London: Luzak & Co. 1930.
6. Parlato, S. J.: The sandfly (Caddis fly) as an exciting cause of allergic coryza and asthma: II. Its relative frequency. *J. Allergy* 1:307, 1930.
7. Ozere, R. L.: Demethylchlortetracycline photosensitivity. *Canad. M. A. J.* 85:1199, 1961.
8. Horton, B. T., Braun, G. E., and Roth, G. M.: Hypersensitiveness to colds, *JAMA* 107:1263, 1936.

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(Advertisement)

(Continued from Page 1246)

The control of air pollution is also vital to the control of water pollution since in the water cycle the rains clear the air of many pollutants. Instead of solving the air pollution problem, therefore, we convert it to water pollution. It appears quite likely the latter may be the more tolerable! I don't know!

The solid waste problems cannot be ignored in solving the pollution problems. If we burn our dumps and solid waste disposal heaps, we pollute the air. If we put it in the streams, we pollute the water. If we pile it up, it stinks and breeds vermin, filth, flies, rats and finally disease.

If we burn our waste and scrub the pollutants from the air with water, we convert our problem to a different medium. The problem would seem to go in circles unless we quantitate wastes and hazards and coordinate our control programs. The biologic laws of this universe include natural purification processes. In time, nature effects a balance. The scientific factors for each waste or pollution control system involve natural purification factors.

Our solid waste problems are exploding with new problems. Disposable items are convenient and nice for the user. They can also be expensive for the consumer and create enormous pollution problems. If a truckload of soft drinks goes out in disposable containers, cartons and cases, the waste product also initially occupies the same truckload space. If the containers are plastic, the natural decay rate will be extremely slow and burning seems the only practical method of handling. If the containers are glass, salvage seems inevitable. (Plastic containers and Glass containers.)

If our detergents used in washing and cleaning are not biologically or naturally degradable then they persist and defy pollution control efforts. If our solvents are not salvaged, their control may be difficult and the effects far reaching.

Pollution occurs when the load of waste exceeds the natural purification process for that location, medium and time. Therefore, a definite factual scientific and accurately determined technology is essential to control each pollution problem. As circumstances change the solution must also change if the balance is to be achieved.

The solution to pollution is to bring the circumstances to an optimum natural balance. In the past we have been content to collect our wastes and put them out of sight and out of mind until they began to rot and suddenly they were no longer either out of sight or out of mind. Wastes resist being ignored or neglected.

It seems the more we have the more we waste, and the more we waste the more environmental pollution we have. The esthetics become affected, then the economics, and finally action for correction.

Dealing with pollution of any type affecting any element of the environment deserves careful, scientific and rational consideration which must be linked with factual conclusions resulting in appropriate action.

The complexity of man's existence is a delicate balance of man, his surroundings, and his enemies. (i.e. harmful or noxious factors.)

In public health we have developed an understanding of the interplay of this balance and speak of the balance of host, agent and environment.

If man is the host and the environment is healthy, the agents which threaten health are under control or are within balance. If man is weak, the environment must be more favorable or the agents weaker if a balance is to be maintained. The harmful effects of certain agents or pollutants in air and/or water are well known, but in general we have not yet scratched the surface in unraveling the harmful effects of many air pollutants.

The normal components of air if unbal-

(Continued on Page 1253)



following infection

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(Continued from Page 1251)

anced may be lethal. In less severe cases normal functions may be impaired temporarily or permanently. For example, too high a concentration of oxygen in premature infants can result in blindness, which is permanent and irreversible. Carbon dioxide which stimulates our brain to function resulting in the regulation of the breathing rate, if too high, acts in the reverse. Early in the process of carbon dioxide poisoning thinking and reasoning is inhibited. This later progresses to loss of consciousness and finally death.

It is a recognized fact that simple dust is detrimental to the lungs as an irritant completely aside from any chemical or allergic properties it may possess.

The long term effects of carcinogens in air will need intensive study and doubtless the corrective measures will be as difficult to effect as convincing a habituated public to stop smoking to save their own personal lives.

Air pollution control is specifically and without a doubt the responsibility of the official health agency. The source of the pollution or contamination determines the type of professional competence to specify its control. Air borne infection in which diseases are transmitted from one person to another by the medium of droplet nuclei, is chiefly a medical problem of identification. Medical control of air borne infectious diseases merges with the interest of the engineers in formulating a practical means of control or abatement of the hazards.

Air is our primary natural resource—our most urgent and vital element of life. Our atmosphere is one of the distinguishing characteristics of this planet. It is not only usable but consumable, and subject to misuse.

Some pollutants are natural, but much of the air pollution is the result of burning or a result of the heat produced. Many deaths resulting from fires occur because of polluted air rather than the direct thermal effects of burns. The victim is frequently suffocated before the flame reaches him. The air pollu-

tion which seems to concern the public is more insidious, indirect and obnoxious. Its lethal effects may be delayed or be developed over a period of years. On the one hand, it seems foolhardy to attempt a control of general air pollution when we aren't sufficiently concerned to abate our personal proven damnation by stopping smoking. This is no theory. These effects are proven and predictable and sure. Yet we already have the individual action program in our hands without wondering about or investigating strange and exotic chemicals which under the worst conditions affect a limited area or a small percentage of the population at a time. I'm not minimizing general air pollution effects. I am merely looking at a health priority.

If our gases, odors, particulate matter, incompletely oxidized chemicals and other air pollutants are not filtered out or scrubbed out of the air by an effective process or properly disposed at harmless levels, we pollute the air. The natural processes of air purification for many pollutants are unexplored and unknown.

The level of air pollution which the world can naturally assimilate is not known. There are many unanswered questions in environmental pollution control, but one thing is definite and sure. We know enough about its ill effects on economics, esthetics and health that action is required, not optional. If we wait for answers, we never begin; but we already know more than we are doing. It's too late to prevent existing problems; therefore, let us begin.

The control of air pollution is a must, and its urgency becomes greater each year. The effects of air pollution on people is a medical problem, and this aspect must take pre-eminence and precedence over economic effects, whether the economic effects be the dollar loss from air pollution or the cost of control efforts.

The most immediate and attainable goal of air pollution control is for man to stop smok-

(Continued on Page 1256)

**How long will
it take her
to recover from
her hip fracture
if she just
doesn't care?**



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Is she alert, encouraged,
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well soon?

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*Adequate dosage is important: Prescribe Alertonic—
one tablespoonful t.i.d., 30 minutes before
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Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Merrell

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Cincinnati, Ohio 45215

(Continued from Page 1253)

ing. Only then can he demand of his neighbors that they abate their problems.

The control of industrial pollution, whether air or water, is a problem for which industry must furnish answers and provide solutions.

The health need for pollution control and the determination of acceptable or tolerable limits is a highly complex medical problem which must be established by the official health agency. This agency needs the best technical advice from polluters and pollutees.

The position in which the official health agency finds itself is one of facing two diametrically opposed sides in pollution. On the one hand is the pure pristine purist (conservationist), and on the other is the careless and willful pollutionists (industrialist).

Health agencies often become the arbitrators and always must keep the health of the people as their principal objective.

The final decisions must be based on what is best for human health and welfare as the primary focus. Consideration must be given to the symbiotic relationship between the host, agents and the environment. This can only be accomplished by reasoning together. In this manner the balance can be achieved; and man will fulfill his mission and charge by God, the Creator of this world, when He said to Adam and Eve in the Garden of Eden (Genesis 1:28a): "And God blessed them, and God said unto them, be fruitful, and multiply, and replenish the earth, and subdue it." These last two words are the keys to the remainder of the charge. They demand action.

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BUREAU OF VITAL STATISTICS

PROVISIONAL BIRTH AND DEATH STATISTICS AND COMPARATIVE DATA

Ralph W. Roberts, M. S., Director

DECEMBER 1966

Live Births	Number Registered During			Rates* (Annual Basis)		
	December 1966			1966	1965	1964
Deaths	Total	White	Non- White			
Causes of Death						
Live Births	5,550	3,601	1,949	18.6	20.3	22.0
Deaths	2,779	1,879	900	9.3	10.0	9.4
Fetal Deaths	107	53	54	18.9	17.2	19.1
Infant Deaths						
under one month	121	68	54	22.0	18.0	23.9
under one year	183	87	96	33.0	34.3	38.9
Maternal Deaths	2		2	3.5	3.3	9.3
Causes of Death						
Tuberculosis, 001-019	17	6	11	5.7	7.1	6.2
Syphilis, 020-029	2	1	1	0.7	1.4	3.1
Dysentery, 045-048						
Diphtheria, 055	1	1		0.3	0.3	
Whooping cough, 056						0.3
Meningococcal infec- tions, 057	4	1	3	1.3	0.7	0.7
Poliomyelitis, 080, 081					0.3	
Measles, 085						0.3
Malignant neoplasms, 140-205	356	275	81	119.0	119.8	113.7
Diabetes mellitus, 260	66	44	22	22.1	19.6	11.8
Pellagra, 281						
Vascular lesions of central nervous sys- tem, 330-334	368	223	145	123.0	138.4	116.5
Rheumatic fever, 400-402	2	1	1	0.7	0.3	
Diseases of the heart, 410-443	884	656	228	295.6	321.1	302.7
Hypertension with heart disease, 440-443	103	40	63	34.4	42.0	45.4
Diseases of the arteries, 450-456	60	39	21	20.1	23.3	20.8
Influenza, 480-483	3	2	1	1.0	1.4	3.5
Pneumonia, all forms, 490-493	103	63	40	34.4	45.0	37.4
Bronchitis, 500-502	9	8	1	3.0	3.4	1.7
Appendicitis, 550-553	4	2	2	1.3	0.7	0.3
Intestinal obstruction and hernia, 560, 561, 570	10	8	2	3.3	5.4	1.7
Gastro-enteritis and colitis, under 2, 571.0, 764	7	1	6	2.3	2.7	4.2
Cirrhosis of liver, 581	22	14	8	7.4	8.8	5.2
Diseases of pregnancy and childbirth, 640-689	2		2	3.5	3.3	9.3
Congenital malforma- tions, 750-759	29	21	8	5.2	6.2	5.5
Immaturity at birth, 774-776	30	17	13	5.4	4.3	6.6
Accidents, total, 800-962	250	171	79	83.6	87.3	72.5
Motor vehicle acci- dents, 810-835, 960	134	100	34	44.8	42.3	39.2
All other defined causes	399	260	139	133.4	133.3	139.0
Ill-defined and un- known causes, 780- 793, 795	151	65	86	50.5	62.6	65.2

*Rates: Birth and death—per 1,000 population

Infant deaths—per 1,000 live births

Fetal deaths—per 1,000 deliveries

Maternal deaths—per 10,000 deliveries

Deaths from specified causes—per 100,000 population

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director
Current Morbidity Statistics

1967

*E. E.

	Jan.	Feb.	Feb.
Tuberculosis	172	143	115
Syphilis	164	128	124
Gonorrhea	392	253	274
Chancroid	3	0	3
Typhoid fever	2	1	0
Undulant fever	0	0	0
Amebic dysentery	1	2	2
Scarlet fever & strep. throat	692	483	137
Diphtheria	1	0	1
Whooping cough	15	2	5
Meningitis	11	12	6
Tularemia	0	0	0
Tetanus	0	3	1
Poliomyelitis	0	0	0
Encephalitis	0	0	0
Smallpox	0	0	0
Measles	120	219	314
Chickenpox	136	148	159
Mumps	89	118	76
Infectious hepatitis	32	32	56
Typhus fever	0	0	0
Malaria	1	7	0
Cancer	393	403	607
Pellagra	0	0	0
Rheumatic fever	22	21	13
Rheumatic heart	20	17	32
Influenza	94	139	2,987
Pneumonia	370	307	361
Rabies—Human cases	0	0	0
Pos. animal heads	0	3	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph.D., Director

February 1967

Examination for Intestinal Parasites	1,852
Examination for Malaria	1
Salmonella & Shigella (blood-feces-urine-food)	245
Examination for tubercle bacilli	4,054
Examination for gonococci	1,919
Serological test for syphilis	26,189
FTA	43
Darkfield	1
Brucella	1
General Bacteriology (cultures for isolation and confirmation)	12
Staphylococcus (cultures for isolation and confirmation)	271
Examinations for diphtheria	8
Streptococci examinations	2,448
Mycology	29
Agglutinations	9
Vincent's infection	5
Complement fixation tests	79
Test for Phenylketonuria (PKU)	5,641
Cytology	746
Water examinations	2,867
Milk and dairy products examinations	4,764
Sea food examinations	86
Examination for Negri bodies (smears and animal inoculation)	264
Virology	5
Rh Factor bloods	595
Miscellaneous	397

TOTAL 52,531



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(One-Half Sodium Amobarbital and One-Half Sodium Secobarbital)



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Indications: Tuinal, comprised of equal parts of Seconal® sodium (sodium secobarbital, Lilly) and Amytal® Sodium (sodium amobarbital, Lilly), is indicated for prompt and moderately long-acting hypnosis.

Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in pa-

tients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Supplied: ¼, 1½, and 3-grain Pulvules®.

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The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—The Department of Health, Education and Welfare stated in a special report that both hospital charges and physicians' fees increased sharply last year.

A continued increase in health care costs was predicted in the report ordered last August by President Johnson.

Drugs were not a significant factor in the recent accelerated increase in health care prices, the report said. But it added that "drug prices are higher than they would be if there were more vigorous competition at either the manufacturing or drugstore level."

As for the two major components in the Medical Care Index, the report said:

—Physicians' fees, which had been rising about 3 per cent a year in 1960-65, went up 7.8 per cent in 1966—the biggest annual increase since 1927.

—Hospital daily charges, rising about 6 per cent a year between 1960 and 1965, went up 16.5 per cent in 1966—the largest annual increase in 18 years.

The increase in doctor fees was attributed to a combination of basic factors: "more people are seeking doctors' services more often and the number of active physicians is increasing relatively slowly." The study found no evidence that Medicare, which went into effect last July 1, was a major factor in the rise in doctors' fees.

The increase in hospital charges was attributed largely to rising wages, which account for two-thirds of hospital costs, and increases in the price of things hospitals buy. The wage rise has not been off-set by increased productivity, the report said, and rising standards of care in hospitals have required more expensive equipment and facilities.

Meantime, Robert J. Myers, the Social Security Administration's chief actuary, told the House Ways & Means Committee, that hospital costs had risen much faster than the Administration anticipated since the Medicare plan went into effect. If they continue their upward spiral, the costs will eat away the safety margin included under the Medicare financing plan, Myers said.

The HEW report held out little hope for an early end to medical price increases. However, it recommended a series of actions "to slow down these increases and to promote the efficient use of medical care resources."

Recommendations in the report included:

—Comprehensive community health care systems should be developed, demonstrated, and evaluated.

—Group practice, especially prepaid group practice, should be encouraged.

—Private and public health insurance plans should be broadened to include more alternative types of medical care.

—States should move quickly to establish and support strong health planning agencies at the state and local levels.

—Cost-reducing methods of reorganizing the delivery of services in hospitals and other providers of health services should be developed, demonstrated, and implemented.

—Federally supported health care programs should be used to train physician assistants, evaluate their performance, and disseminate the results.

—Federal funds available under the Health Professions Educational Assistance Amend-

(Continued on Page 1262)

In peptic ulcer... antacid therapy with a new benefit



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Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.



(Continued from Page 1260)

ments of 1965 should be used to support and encourage innovations in health professions' education and training which promote the efficient practice of medicine.

—HEW should undertake an intensive examination of frequently prescribed drugs to assess the therapeutic effectiveness of brand name products and their supposed generic equivalents.

—The Food and Drug Administration should provide doctors with authoritative information of the efficacy and side effects of all drugs.

—The HEW should call a national conference of leaders of the medical community and public representatives to discuss ways to improve the quality and efficiency of medical care delivery.

To carry out the recommendations in the report and allied directives from Johnson, HEW Secretary John W. Gardner said he would take a number of actions, including establishment of a National Center for Health Services Research and Development and calling of a national conference on medical care costs.

* * *

The American Medical Association contends there is not sufficient justification for a federal law that would ban dispensing of drugs and devices, such as eyeglasses, by physicians.

Dr. James Z. Appel, immediate past president of the AMA, outlined the AMA position in testimony before the Senate Antitrust and Monopoly Subcommittee which held hearings on such legislation (S. 260) introduced by its chairman, Sen. Philip A. Hart (D., Mich.).

The legislation appeared to stand little chance of being approved by Congress, at least this year. Hart has unsuccessfully pushed similar legislation for the past few years.

The AMA believes that "federal legislation cannot be justified unless there is a compel-

ling need," Appel testified. In this case, he said, "such a need does not exist."

"Organized medicine looks upon dispensing as neither immoral nor unethical in and of itself," the AMA official said. "Organized medicine believes—and the medical practice laws of the states confirm—that dispensing drugs and devices is a privilege granted to physicians in order that they may best serve the public interest.

"... American medicine condemns any abuse of privilege. But the bill under consideration would withdraw the privilege entirely, regardless of its benefits for the many, because it is abused by the insignificant few."

Dr. Shirkey Reappointed On AMA Council on Drugs

Harry C. Shirkey, M. D., Birmingham, Ala., has been reappointed a member of the Council on Drugs of the American Medical Association.

Dr. Shirkey's reappointment was announced by Wesley W. Hall, M. D., chairman of the AMA's Board of Trustees.

The AMA Council, composed of medical experts appointed by the Board of Trustees, provides authoritative and unbiased information on drugs to the medical profession to encourage rational therapy. The Council, assisted by staff members and consultants, evaluates available evidence on the action, uses, dosages, hazards and other pertinent properties of drugs. This information is first reported in *The Journal of the AMA* and later in the annual publication *New Drugs*.

Through its Registry on Adverse Reactions periodic reports by the Council alert the medical profession regarding the safety of drugs and commonly used chemicals. The Council also cooperates with the United States Pharmacopeial Convention and the American Pharmaceutical Association in adopting nonproprietary names for drugs. Liaison is maintained with the World Health Organization in the attempt to adopt common international nonproprietary names.

AMA Evaluates Oral Contraceptives

Oral contraceptives have caused some adverse reactions, but no really serious side effects can yet be attributed directly to their prolonged use, says a report of the Council on Drugs of the American Medical Association in the February 27 Journal of the AMA.

Further study is needed of the oral contraceptives' complex biochemical effects, the Council said.

In the meantime, the physician has been given an "uneasy responsibility." He must use his professional judgment and be apprised of latest drug information when prescribing these pharmaceutical preparations in order that his patients may derive their full benefits.

This has broadened the meaning of therapeutics, the Council pointed out. These drugs are given to healthy people, not sick ones, and "any possible hazards connected with their use must be weighed against their expected benefits, perhaps more critically than has ever been the case before."

"A variety of adverse reactions to the oral contraceptives have been described. Some of these effects . . . are unquestionably drug-related; fortunately, most of these are not of a serious nature, although they may be annoying to the patient.

"More serious effects that have been ascribed to these preparations are seen rarely, and causal relationships have not as yet been established," the report said.

Some of the side effects:

Breakthrough bleeding or spotting appears to be somewhat greater with the combination progestogen-estrogen type of contraceptive preparation; its occurrence with the newer, sequential-type preparations usually is related to missed doses. The frequency of breakthrough bleeding with the progestogen-estrogen combinations tends to diminish with successive cycles of therapy.

Failure of menstrual bleeding may occur with all oral contraceptives. The frequency varies; when it occurs the next cycle of treat-

ment is begun seven days after the last tablet was taken.

The failure of menstrual bleeding after two consecutive cycles may indicate a possible pregnancy.

Decreased glucose tolerance has been reported in women receiving the progestogen-estrogen combinations; diabetic responses to glucose tolerance tests and worsening of diabetic conditions also have been reported. It is likely that similar effects may be produced by the sequential preparations, although definitive information is lacking.

There is no proof that oral contraceptives cause circulatory complications; however, physicians should use care in prescribing them for women with vascular disease until more information is available.

Central nervous system and ocular complications have been ascribed to these preparations. "Although evidence is not sufficient to establish a cause-and-effect relationship, therapy should be stopped and the status of the patient carefully evaluated if any symptoms or signs suggesting cerebrovascular or ocular changes appear," the report said.

Headache may occur with any of the preparations. Nervousness, irritability, lethargy, and depression have all been attributed to oral contraceptives.

"These symptoms are influenced by many emotional factors and occasionally may cause the patient to discontinue medication," the report said. "On the other hand, preexisting similar complaints may be relieved in some patients when they are taking oral contraceptives."

Abnormalities in liver function tests have been observed, but such changes usually are not clinically significant. "Although changes in liver function may be expected to be reversed when the medication is discontinued, caution is necessary when oral contraceptives are used in patients who have a history of impaired liver function," the report said.

(Continued on Page 1266)

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(Continued from Page 1263)

Excessive weight gains have been reported in some women, mostly in association with the older contraceptive preparations that contain larger doses of estrogen. The lower dose preparations are less likely to produce significant weight changes.

Nausea has been a frequent complaint during the first cycle of therapy, but usually diminishes as therapy is continued.

"The possible relationship of oral contraceptives to cancer is controversial," the report said. "Theoretically, some risk is incurred with prolonged estrogen therapy; however, extensive studies have revealed no evidence of carcinogenesis in association with the use of oral contraceptives."

Oral contraceptives are of two types: the progestogen-estrogen combinations, introduced in 1960, and the sequential preparations, introduced in 1965.

All of the progestogen-estrogen combinations are used in the same way; counting from the first day of menstruation, a single daily dose is taken from the 5th through the 24th day of the cycle. Withdrawal bleeding usually occurs within three to four days after the last dose.

"The progestogen-estrogen combinations are the most effective medical means for preventing conception yet devised. The available data indicate that pregnancy will occur in less than 1 per cent of women who use this method properly," the report said.

The sequential-type oral contraceptives are given for 20 or 21 days in each treatment cycle, depending upon the preparation. Counting from the first day of withdrawal bleeding, the estrogenic component is taken in a single daily dose for 15 or 16 days from the 5th through the 19th or 20th day of the cycle. The mixture of the estrogen and the progestogen is taken for the next five days. Withdrawal bleeding usually begins two to five days after completion of the cycle of medication.

Although these preparations also are highly effective, the available information indicates that strict adherence to the treatment schedule is more critical than is the case with the progestogen-estrogen combinations," the report said. "In the majority of cases of reported pregnancies, the patients missed taking tablets during the period of estrogen administration.

Are the oral contraceptives safe? It's a difficult question to answer. The Council said:

"The effects of long-term administration of oral contraceptives on various organs and systems are largely unknown and are the subject of continuing investigations. No serious adverse effects attributable solely to the prolonged use of these preparations have thus far been reported."

Dr. Thuss Reappointed on Council on Occupational Health

William G. Thuss, Sr., M. D., Birmingham, Ala., has been reappointed a member of the Council on Occupational Health of the American Medical Association.

Dr. Thuss' reappointment was announced by Wesley W. Hall, M. D., chairman of the AMA's Board of Trustees.

The AMA Council produced and distributes more than 75 publications for physicians, nurses and others on such subjects as: workmen's compensation; survey of hazards in the working environment; pre-placement and periodic physical examinations; rehabilitation; employment of the handicapped; industrial nursing; disability evaluation; absenteeism; radiation in industry; safety programs; small plant occupational health programs; industrial dermatoses; development of company medical policies; diagnosis of occupational illness. The Council also conducts the annual congress on occupational health.



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Indications: Infections due to pathogens susceptible to oral penicillin G. Prophylaxis of rheumatic fever in patients with previous history of the disease.

Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin-allergy may occur. Measures for treating anaphylaxis should be readily available: epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; anti-

histamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β -hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

Composition: Tablets—125 mg. (200,000 units) and 250 mg., (400,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

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ORAL **PEN•VEE® K**
(potassium phenoxymethyl penicillin)



Physician Responsibility In Preventing Suicide

The physician has both an opportunity and responsibility to prevent many suicides, says the current (January 30) Journal of the American Medical Association.

Because many disturbed people see a physician for some real or imagined physical complaint before attempting suicide, the doctor has a chance to observe their condition and take action to help save their lives.

The physician walks a fine line, however, between his ethical responsibility to preserve the patient's privacy when the threat of suicide is not serious, and his responsibility to save life when it is.

This responsibility for taking preventive action in suicide threats is an added role for the physician, one he has been asked to assume only recently, notes a Journal editorial.

One Journal report presents a Boston psychiatrist's multi-step test for determining the seriousness of a suicide threat. The physician's responsibility for preventing suicide increases with each indication that the patient's threat is serious, said Philip Solomon, M. D., of the Boston City Hospital psychiatric service and Harvard Medical School.

A second Journal article by two St. Louis psychiatrists notes that alcoholics who have recently lost a loved one are particularly vulnerable to suicide. They report that among 31 consecutive alcoholic suicides in an urban area, nearly half the deaths occurred within a year after the loss by death, divorce, or separation of someone close to the victim. The majority of these suicides happened within six weeks of the loss.

It is impossible to prevent many suicides, partly because the triggering emotional crisis cannot be anticipated. It is possible, however, to determine when a person is alcoholic and to anticipate such crises as divorces and separations, said the authors, George E. Murphy, M. D., and Eli Robins, M. D., of the Washing-

ton University department of psychiatry, St. Louis.

"Probably most normal people have had suicidal or homicidal thoughts at some time in their lives," Dr. Solomon said.

When they talk about these in the doctor's office, it may not be serious at all. But when the doctor asks, "Have you thought about **how** you would do it?" and if the patient has some positive answers about sleeping pills, jumping, drowning, shooting, etc., then further questioning is called for, Dr. Solomon said.

"A positive answer here forces the physician to consider himself involved in the burden of responsibility (for preventing suicide), though not yet heavily. He must certainly pursue the issue intensively," Dr. Solomon said.

There is great difference, however, between thought and action in suicide. Has the patient made any move to implement his impulse for killing? Has he saved up pills and hidden them away for later use? Has he bought a rubber hose to fit onto his auto exhaust pipe? Has he gone to the top of a high building to "have a look?"

"If the patient has taken any kind of action in preparation for violence, the physician's responsibility becomes strong," Dr. Solomon said. "With few exceptions, he must share his burden with the patient's family and recommend psychiatric consultation. In homicidal threat there should be referral to civic authorities. Hospitalization should be seriously considered."

Finally, a suicide attempt greatly increases the likelihood of another. A physician may not be too concerned over the taking of two or three sleeping pills or light scratches on the wrist—these may be only "gestures" for getting attention.

But when a wife turns on the gas just be-

fore her husband is expected home, or when someone takes enough pills to sleep all the next day, or any suicide attempt in which a note is left, is an indication of a serious suicide attempt.

"If a physician feels that the patient is actively suicidal his duty is obvious. The patient must be told that the physician's responsibility may have to go beyond or counter to the patient's wishes in order to protect him. Hospitalization must certainly be considered seriously and the relatives consulted. A psychiatric consultation should be the rule.

"The physician must remain with the case, with or without the patient's consent, until the burden of responsibility is clearly taken up by someone else," Dr. Solomon said.

This burden of responsibility is relatively new, notes the Journal editorial.

"The physician's involvement in a death

caused by violence has been limited until recently to giving expert testimony. The doctor merely assisted legal authorities in pinpointing the time of death or in clarifying the nature of sustained injuries.

"To this traditional role has now been added another—one much more meaningful and responsible. The physician is expected to help prevent the violent act—obviously no small responsibility—through early recognition of its threat in his emotionally disturbed patients."

The physician often is the only one aware of the oncoming disaster, the editorial said. "His foreknowledge places a responsibility on him. Even when it is ultimately shared with psychiatric consultants, patient's relatives, and hospital or civic authorities, the burden of this responsibility is nonetheless primarily his."

*When the problem
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**for topical antibiotic therapy with minimum
risk of sensitization**

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in 1/2 oz. and 1 oz. tubes.

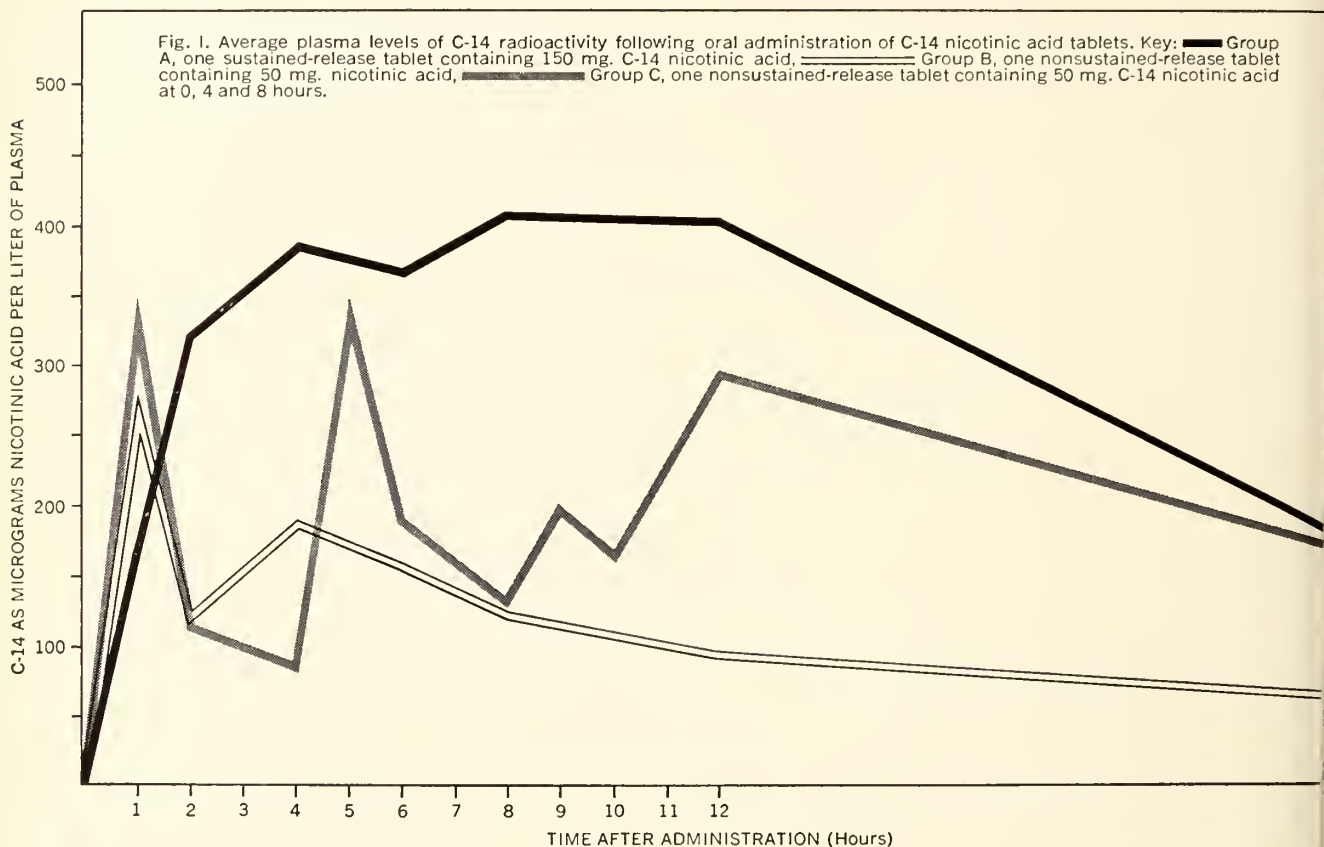
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Sustained circulatory, respiratory and cerebral stimulation for the



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

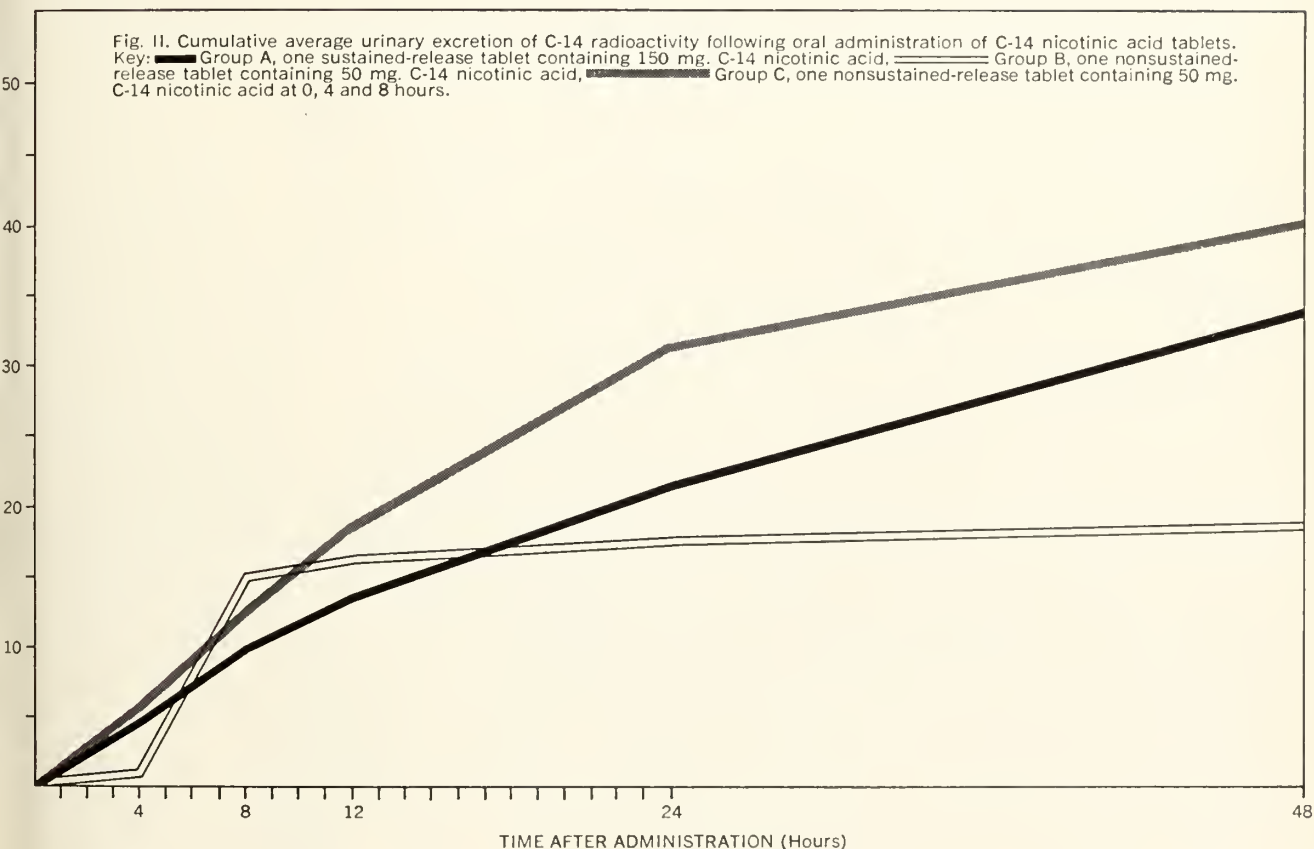
mindedness or senile confusion. Therapy can be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation with a minimum amount (if any) of "flushing." A cerebral and cerebrovascular circulation is complemented by nitylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert.

ged and debilitated

Fig. 11. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid. — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



s confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, anathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

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You can't set her free. But you can help her feel less anxious.

You know this woman.

She's anxious, tense, irritable. She's felt this way for months.

Beset by the seemingly insurmountable problems of raising a young family, and confined to the home most of the time, her symptoms reflect a sense of inadequacy and isolation. Your reassurance and guidance may have helped some, but not enough.

SERAX (oxazepam) cannot change her environment, of course. But it can help relieve anxiety, tension, agitation and irritability, thus strengthening her ability to cope with day-to-day problems. Eventually—as she regains confidence and composure—your counsel may be all the support she needs.

Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax[®]
(oxazepam)



Wyeth Laboratories
Philadelphia, Pa.

Europe's Young Physicians Seek Opportunities In U. S.

In the past eight years nearly 125,000 of Europe's best educated young people have in one way or another sought admittance into the United States.

They are graduate physicians in search of high-quality advanced education and the right to work unfettered by red tape and restrictions. Not finding it in their homelands, they turned to the United States.

Actually only a fraction of the 15,000 to 20,000 hopeful young doctors seeking entry each year ever arrive here. Figures of the Association of American Medical Colleges show that of those who take the Educational Council for Foreign Medical Graduates examination, only about one-fifth are accepted.

Still, that means that about 4,000 are arriving from Europe annually to work and study in medical schools and hospitals. And a large number of these are staying to practice medicine.

They are of all nationalities—German, French, Austrian, Swedish, and especially English. And their loss has helped create what for Europe is a major problem—the so-called “brain drain.”

Medicine is not the only branch of science involved in the brain drain. Europe is also losing engineers, chemists, physicists—in fact scientists and technicians in all areas—to the United States. But the major exodus seems to be among the medically oriented.

The implications of the flight of its young scientifically educated has European leaders frankly worried. There is concern that the continent has become undeveloped scientifically and technologically in comparison with the United States. What's more, the gap is growing.

Even the Russians are fretful. For while they permit no emigration, they feel that be-

cause of the absence of scientific give-and-take in Europe generally, their own scientific programs are suffering.

Premier Kosygin of the Soviet Union made this clear during his visit to France. He proposed a “technological alliance” between Russia and Western Europe in order to end what he indicated was the dependence of Europe on advances made in the United States.

Far more concerned with the outcome of the brain drain, however, is Great Britain. The emigration of its young physicians has threatened Britain's National Health Service (NHS) with collapse.

According to their own surveys, about one-third of Britain's medical graduates are leaving the country each year. What's more, the number of medical students going into training has been falling steadily.

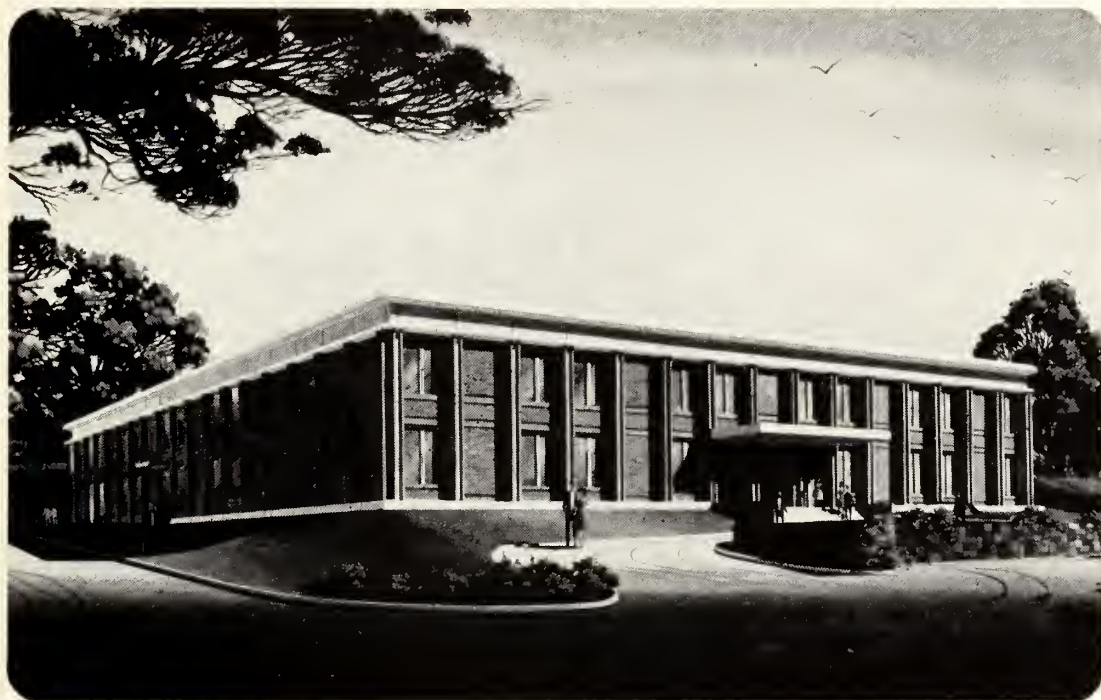
An eminent barrister, R. H. Davison, outlining the British health service dilemma, reported in the British Medical Journal: “Not only has the NHS provided outrageous terms and conditions of service, it has completely failed to inspire respect among the younger members of the profession who see through its Fabian humbug.”

He noted that even the supply of doctors being imported from Pakistan and India to help fill the vacuum of British doctors was dwindling, and criticized the government suggestion “that the advent of the Common Market will permit us to import Italian doctors to run our Health Service.”

“Clearly,” Davison wrote, “fourteen years of socialism have made us completely shameless, for no one can believe these policies to be in the national interest.”

That was five years ago. Since then the

(Continued on Page 1276)



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

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(Continued from Page 1274)

tempo of emigration from Britain has accelerated despite government efforts.

Why? The consensus of those British physicians arriving in this country seems to be that they have no wish to be "hand maidens of the government."

As one young resident said: "We're not exactly forced into servitude by the government, but we're not exactly free to practice our profession either."

"At least in America there is still a choice. But what would happen if that choice were removed, as it has been in Europe? Where would American doctors emigrate to?"

What has caused the drain of European brains? Is it money? Or is it something else?

Partly it is money. British interns say they work an average 100 hours a week for less than \$200 a month. That figures out to about 45 cents an hour.

But the greater issue clearly is one of "scientific climate." Over-regulated conditions have served to stymie scientific inquiry; without scientific inquiry there is lack of stimulation, and without stimulation scientific advancement suffers. So goes the analysis of what's wrong with science in Europe.

This, of course, is an oversimplification. But the fact is that the young, scientifically-oriented have shown by their desire to vacate Europe that something about the scientific climate there is inadequate, if not stifling. And whatever it is, the medical school graduates of Europe have turned to the United States in order to get into the mainstream of medical science.

American medicine became a lure to European doctors following World War II when it became clear that the United States had emerged in the forefront of medicine. And despite the efforts by some to downgrade the image of American Medicine in order to foster a European system of medicine in this nation, the United States has continued to

better its standing. If this were not so the "brains" of Europe wouldn't be seeking entry. For they crave scientific excellence along with freedom to practice their profession.

How good is medical science in America? A clear-cut answer is not easily obtained. Some critics, basing their argument wholly on one statistic or another, contend it is not very good. They maintain that because the infant mortality rates and the average life span in certain small European nations are somewhat better than our statistics these nations have better medicine.

Actually such statistics fail dismally as a yardstick for measuring the quality of a nation's medicine. Totally ignored in the conjectures based on these tables are such factors as genetic make up, economic conditions, educational levels and other matters including abortion laws, all of which are reflected in statistics. For example, one of the best assurances of a ripe old age is to be born into a family with a history of longevity. This is a matter of genes, and has nothing to do with medicine. Medicine of course, plays a role in longevity, but it is only one factor of several. Similarly, one of the best buffers against infant mortality is a mother well educated in the facts of childbearing before she becomes pregnant.

The fact is, of course, medical and scientific quality cannot be based on one lone statistical table. Rather it must be judged on the sum total of numerous factors. Such a compilation clearly indicates that the young Europeans are probably right—the United States is the leader in medical science.

In the 21 years since World War II, 23 Americans have been awarded the Nobel Prize in medicine and physiology. That's more than was won by physicians and scientists from all of the other countries of the world combined.

In the same period, well over half of all the major new drug discoveries were developed

(Continued on Page 1282)



'Livingston... vertigo is my doom!' Cried Stanley in his doctor's room.



Said the doc, "For your ills I've got just the pills."



Said Stan, "Antivert, I presume."



Antivert[®] stops vertigo (meclizine HCl, niacin)

Tablets: (meclizine HCl 12.5 mg. and niacin 50 mg.) Syrup: (each 5 cc. teaspoonful contains meclizine HCl 6.25 mg. and niacin 25 mg.)

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Antivert, the leading anti-vertigo product,¹ combines meclizine HCl, an outstanding drug for treatment of vestibular dysfunction, with niacin, a drug of choice for prompt vasodilation. Prescribe Antivert for your patients with vertigo, Meniere's syndrome and allied disorders.

Precautions and contraindications: Frequent, short-lived reactions include: cutaneous flushing, sensations of warmth, tingling and itching, burning of skin, increased gastrointestinal motility, and sebaceous gland activity. In explaining these reactions to the patient, it is suggested that they be regarded as a desirable physiological sign that the niacin is carrying out its intended function of vasodilation. Because of this vasodilation, severe hypotension and hemorrhage are obvious contraindications to Antivert therapy. Although the incidence of drowsiness and other atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when en-

gaging in activities where alertness is mandatory. **Use in women of childbearing age:** A review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum. **Dosage:** One tablet or one to two teaspoonfuls (5-10 cc.) t.i.d. just before meals. Specific requirements for individual patients should be determined by the physician. **Supplied:** Tablets in bottles of 100 and 500. Syrup in pint bottles. Rx only.

References: 1. Based on 1966 data from independent physicians' market survey organization. 2. Scal, J. C.: Eye Ear Nose & Throat Month. 38:738 (Sept.) 1959.

Neobon[®] geriatric supplement helps keep them 'on the go'

Each capsule contains:

(1) Vitamins and Minerals	
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Niacinamide, U.S.P.	50 mg.
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Methyltestosterone, N.F.	1.0 mg.
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Precautions: Contraindicated in patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast or prostate.

Dosage: One capsule, t.i.d. with meals, or as directed by physician.

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The battle with bacteria: cystitis

Artist's conception of cystoscopic view of bladder showing congested blood vessels and edema around ureteral orifice.



Consider Gantanol (sulfamethoxazole)



For vigorous treatment of G.U. infections before the invaders become entrenched...

Gantanol (sulfamethoxazole) offers a comprehensive spectrum of antibacterial effectiveness against most common gram-negative as well as gram-positive invaders. In addition, it provides satisfactory concentrations in

blood and urine with ready diffusion into interstitial fluids for antibacterial activity at foci of bacterial invasion.

Antibacterial activity against *E. coli* and other common urinary pathogens... A review of 153 cases of acute infections reported in the literature shows that

90% responded to Gantanol (sulfamethoxazole), with over one-half of these patients showing excellent relief of symptoms.^{1,2} Even in stubborn chronic G.U. infections, almost 60% of 450 patients improved on Gantanol (sulfamethoxazole), including many who had not responded to other antibacterials.¹⁻⁶

Generally uncomplicated therapy enhances the favorable clinical results... Of the total 686 patients from the studies cited,¹⁻⁶ only three discontinued therapy because of side effects. Most of the side effects reported (approximately 3%) were mild and included nausea and/or vomiting, skin rash, dizziness, headache, gastritis, generalized uneasiness and itching.¹⁻⁶

1. Peters, J. H.: *J. Urol.*, 87:747, 1962. 2. Draper, J. W., et al.: *South. M. J.*, 57:920, 1964. 3. Stewart, B. L.: *J. Urol.*, 87:491, 1962. 4. Hagstrom, R. S.: *Rocky Mountain M. J.*, 59:(2), 37, 1962. 5. Arnold, J. H.: *Clin. Med.*, 71:552, 1964. 6. Nelson, C. G.: *Colorado GP*, 3:(3), 2, 1961.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and renal and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Side Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-John-

son syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How Supplied: Tablets, 0.5 Gm, bottles of 50.

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when there are bacterial invaders in the bladder, prostate or kidneys

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DEXTRO-AMPHETAMINE SULFATE (15 mg.) SUSTAINED RELEASE CAPSULES
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**to help establish
a new dietary pattern**

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness. Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.



LEDLER LABORATORIES

A Division of American Cyanamid Company,
Pearl River, New York

695-6

(Continued from Page 1276)

in this country. As a matter of fact, eighty per cent of the prescriptions written today could not have been written ten years ago because the drugs didn't exist.

But medical progress cannot be measured only in the laboratory. It must also be measured in terms of people, disease, and facilities. Thus the fact that America was building 750 hospitals in the time that England was building one also enters the picture.

So do such matters as the rate of death from various diseases. The death rate from cancer in America, for example, is well below the rate of Western Europe. And since cancer is treatable to some extent, our lower death rate could be interpreted as better

Medical treatment. The same holds true for other treatable diseases, including tuberculosis, pneumonia, strokes and influenza. All of these kill fewer people here, per capita, than in Western Europe.

What it all adds up to is this: Four and a half million Americans alive today would be dead if medicine were practiced with the same amount of knowledge and the same tools as it was just 25 years ago. In that time span—in the past 25 years—medicine has learned more than it learned in the previous 50 centuries.

No one can assign a nationality to such knowledge. It is world wide. But when it comes to teaching and applying that knowledge, the rest of the medical world looks to the United States for leadership.

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**A patient centered
independent hospital for
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Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

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tients are accepted and departmentalized care is provided according to sex and the degree of illness.

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**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

Liquid Meal Called Digestive Aid

By Roswell D. Johnson, M. D.

More games are won by the heart than the stomach, and the pre-game meal is probably overrated as a factor in athletic performance, in the opinion of the Director of Brown University Health Services. Roswell D. Johnson, M. D. said no study conclusively shows any superiority of one food or combination of foods in promoting performance. The important thing is simply to find a diet which will not impair the athlete's function.

Dr. Johnson described a notable early experiment in diet control in athletes. Oxford and Cambridge Universities are traditional rivals in rowing, and during the 1860's the Oxford crew was kept on a rigid diet: underdone beef or mutton, bread, tea and beer. Vegetables and fruits were forbidden. Cambridge crewmen were allowed to eat anything at all. The Oxford athletes were perilously near scurvy, but they had an unbroken string of rowing victories from 1861 to 1869.

"So much for the role of vitamins in athletics," said Dr. Johnson.

The pre-game meal is least important to the man doing a "stint" job such as the javelin, shot put or the high jump, and most important to the crewman or the miler. Carbohydrates, derived from such foods as bread, cereal or macaroni, are essential to endurance. Dr. Johnson pointed out that one liter of oxygen will produce 5 calories when used to burn carbohydrates, but only 4½ calories with fat or protein. The 10% greater efficiency in the former case can be significant. He added that a strenuous football or hockey session 24 hours before a game will deplete the carbohydrates reserves and is therefore inadvisable.

The caloric requirements of a manual laborer are actually far greater than those of an athlete. Crew presents the peak energy need about 1200 calories per hour, while soccer uses about 550 and golf about 300 per hour.

A hard-working laborer will burn 4000 calories per hour and up.

Indigestion caused by pre-game nervous tension is a bigger factor in choice of the diet than the energy requirements of the sport itself, Dr. Johnson indicated. This has caused the current popularity of the liquid pre-game meal, reputed to cut down nervous indigestion during athletic contests.

The familiar "knot in the stomach" is caused by tension-induced contraction of the pyloric muscle, the circular muscle surrounding the stomach outlet. The function of the muscle is to retain food in the stomach until it is liquefied and then release it into the intestine for digestion. When food stays too long in the stomach because of pyloric contraction, vomiting may result. Release of food energy in the intestine is also delayed, compounding the athlete's difficulty.

Highly-salted foods further impede digestion and should be avoided. On the other hand, Dr. Johnson finds the liquid pre-game meal "of tremendous value" in aiding digestion by eliminating the liquefaction process in the stomach. He cited studies by Kenneth Rose, M. D. of University of Nebraska football players in actual competition which confirm this: their liquid meals were emptied from the stomach into the intestine within about 2 hours, versus 5 or 6 for a conventional meal.

Dr. Johnson said that athletes sometimes complain about the lack of bulk in the liquid meal. At Brown University, this problem has been handled by giving a light meal of toast, coffee and peaches in syrup at nine a. m. on contest days, followed by an 8-ounce liquid meal 1½ hours later. The latter provides 1800 calories, equivalent to a meal of eggs, meat, toast with butter, coffee and

(Continued on Page 1286)



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for the menopausal syndrome and female hypogonadism. Novestrol, a pure synthetic estrogen derivative, is related to estradiol which is the primary hormone of the ovarian follicle. It is effective orally and has all the actions of naturally occurring estrogen.

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Indications: Menopausal syndrome and female hypogonadism.

Contraindications: Patients with tumors which estrogen might stimulate.

Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.



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LIQUID MEAL

(Continued from Page 1283)

milk and more than sufficient for the most demanding activity.

The liquid pre-game meals have been much improved since their introduction, said Dr. Johnson. They are available in various forms and flavors, including powders for mixing in either skim or whole milk. In addition, they cost approximately \$1.50 versus a possible \$6 to \$15 for steak-and-potatoes in a restaurant.

• The Conference, presented at the University of Rhode Island, was sponsored by the University and the Rhode Island Medical Society.

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Miller, W. R.: Fractures of the Metacarpals, *Am. J. Orthop.* 7: 105, 1965.

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Smallpox Vaccination

The oldest immunization procedure to protect against disease is vaccination against smallpox.

The Surgeon General of the United States this winter again reminded parents that all children should be vaccinated against smallpox between their first and second birthdays. Smallpox has been wiped out in the United States, but it still is common in some other areas of the world and there always is a risk that it may be brought in by a traveler.

Americans planning vacations abroad were reminded that new smallpox certificates for international travel are required beginning Jan. 1, 1967. Certificates issued prior to Jan. 1 will continue to be valid for the period they previously covered, which is three years for travelers returning from abroad. A new printed form is now available for those being

vaccinated after Jan. 1, which includes information on the type of vaccine used and the origin of the batch from which the dosage was taken.

The new certificate must be completed by the physician, and must include his written signature. The traveler has the responsibility to have his certificate authenticated by the local or state health officer in the area in which the immunizing physician practices.

In addition to primary vaccination during the second year of life, revaccination is recommended at the time of entry into elementary school; at three-year intervals for international travelers and for persons likely to be exposed, such as physicians, nurses and other health workers; at approximately ten-year intervals for others.

Until worldwide eradication of smallpox is achieved, the people of the United States should be vaccinated against smallpox, the Surgeon General declared.

Campaign Against Venereal Disease

Included among educational materials for use in the national campaign against venereal disease is an 18½ - X 23-inch poster in which color is used to dramatize the rapid spread of venereal diseases; syphilis and gonorrhea. In the poster, a single letter is highlighted in color, then two, then more to make this point: In spite of the spread of the disease, VD can be eliminated. Also stressed in the poster is this advice for the eradication of the disease:

- Learn the facts.
- Avoid VD contacts.
- Confide in your physician.

As a public service of the American Medical Association, up to ten copies of the poster will be forwarded to schools upon request. Additional amounts can be obtained at nominal prices: 35¢ each, \$10.00 per 100 or more. (Department of Health Education: "VD can be eliminated," American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610)

"Doctor's Dilemma in World of Changing Morals" To Be Examined in Annual Convention Program

The moral certitudes of yesterday have a habit of becoming moral issues in today's world of kaleidoscopic change.

Examples abound in medicine. Society no longer knows what it wants done about the unwed mother, for instance, even though a physician is expected to have ready answers which will not only help the woman but concomitantly please society.

When is abortion justified? Heat is generated on both sides of the argument, and may at any time be reflected upon a physician who becomes involved.

Yet physician involvement in these and other questions is demanded by the public. As an important segment of the community the individual physician as well as the medical profession is expected to contribute to the fixing of moral boundaries.

This is "The Doctor's Dilemma in the World of Changing Morals," the subject of a panel discussion to be held Sunday, June 18, at the American Medical Association's 116th Annual Convention in Atlantic City, N. J. The program begins at 8:15 p. m. in Convention Hall.

Sponsored by the AMA Committee on Medicine and Religion, it is the fifth such program centering on moral-ethical issues,

according to the Rev. Dr. Paul B. McCleave, LLD, director of the Department of Medicine and Religion. The first, on "The Terminal Patient," was presented at the 112th Annual Convention in 1963.

Topics scheduled for discussion are: Unwed Mother, Contraceptives and the Coed, Abortion, and Alcoholism.

Panelists are to be: the Rev. Dr. Seward Hiltner, Ph. D., professor of theology and personality, Princeton Theological Seminary, Princeton, N. J.; Harold I. Lief, M. D., formerly professor of psychiatry, Tulane University School of Medicine, New Orleans, La., presently professor of psychiatry and director, Division of Family Study, University of Pennsylvania, Philadelphia, Pa.; Thomas J. O'Donnel, S. J., formerly, professor of moral ethics, Woodstock Seminary and Georgetown University School of Medicine, Washington, D. C.; and, John Rock, M. D., director, Rock Reproductive Clinic, Inc., and clinical professor of gynecology, emeritus, Harvard University School of Medicine, Boston, Mass.

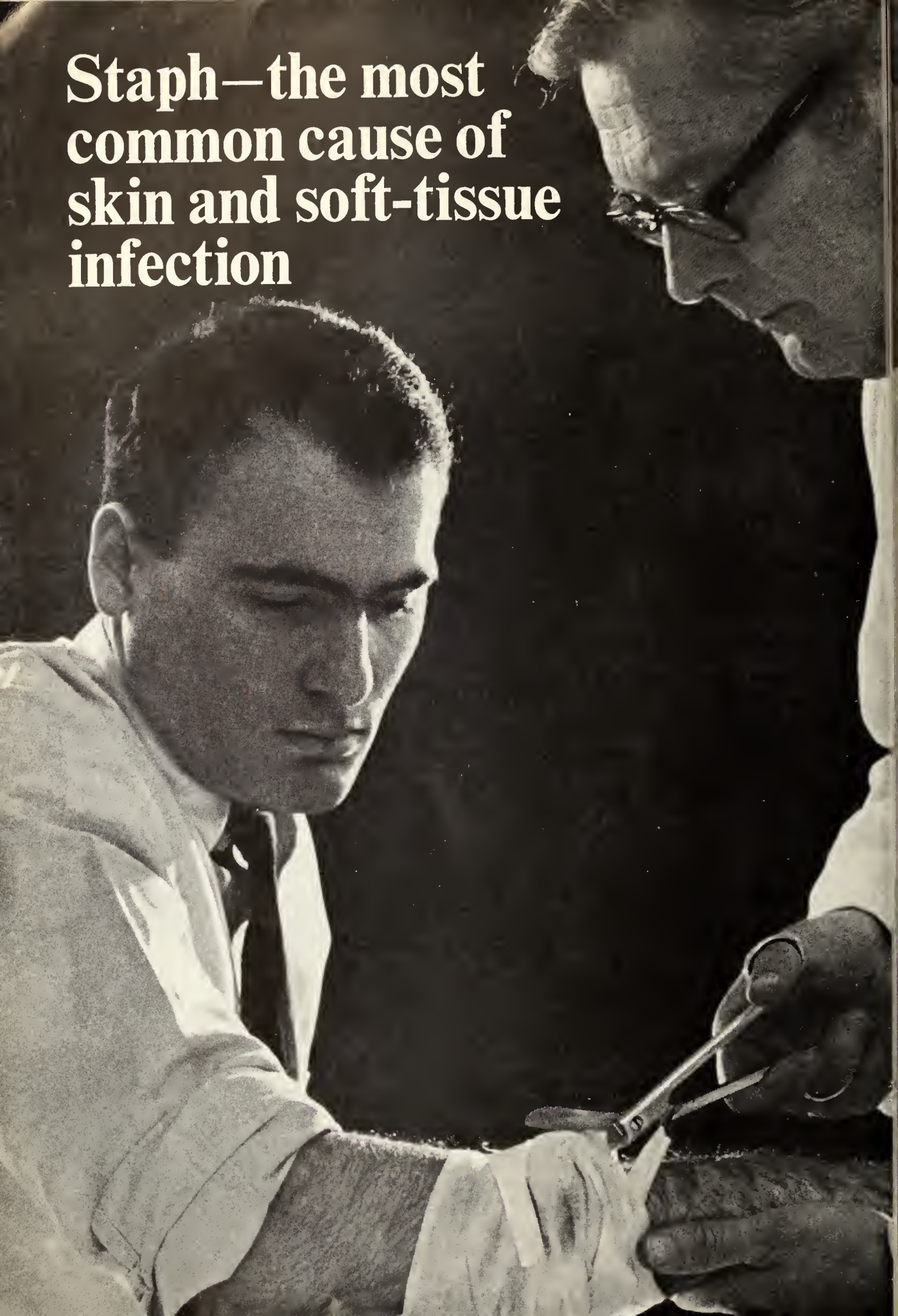
"We will not be arguing the rightness or wrongness of the problems," said Dr. McCleave, who will serve as moderator. "Our purpose will be to examine the dilemma of the physician who must not only work with the problems but become involved in them."

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PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY: 8:12.6

References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N.Y. 2. Data on file, Bristol Laboratories.

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INDEX TO ADVERTISERS

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Ames Company	1176	Parkwood Hospital	1275
Appalachian Hall	1195	Peachtree Hospital	1290
Ayerst Laboratories	1232, 1233	Philips Roxanne Laboratories	1270, 1271
Bristol Laboratories	1189, 1288, 1289	Pitman-Moore	1178, 1179
Burroughs Wellcome Company	1269	Wm. P. Poythress & Company	1175
Dorsey Laboratories	1247, 1248, 1249, 1250	Riker Laboratories, Inc.	1191
Durr Surgical Supply Company	3rd Cover	A. H. Robins	1171, 1221
Geigy Pharmaceuticals	1192, 1193	Roche Laboratories	4th Cover, 1278, 1279
Glenbrook Laboratories	1235	J. B. Roerig & Company	1277
Health-Mor, Inc.	1203, 1204, 1205	Wm. R. Rorer, Inc.	1165, 1182, 1284, 1285
Highland Hospital	1256	Searle	1224, 1225
Hill Crest Hospital	1282	Smith Kline & French	1234
Hynson, Westcott & Dunning	1161	The Stuart Company	1261
Lederle Laboratories	1222, 1223, 1252, 1280, 1281	Syntex Laboratories	1166, 1167, 1168, 1169, 1264, 1265
Eli Lilly & Company	1st Cover, 1172, 1173, 1174, 1210, 1226, 1227, 1228, 1258, 1259	Winthrop Laboratories	1163
		Wyeth Laboratories	1208, 1209, 1267, 1272, 1273



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THROUGH THE YEARS

"It is almost a quarter of a century," said Dr. George A. Ketchum of Mobile, addressing the Association in annual session, Montgomery, March 15, 1870, "since the first convention of medical men of this State assembled in the City of Mobile, and laid the corner-stone of what has since become "The Medical Association of the State of Alabama." The Selma Medical Society was the first to urge upon the profession the need for medical organization. Mobile not only promptly responded, but cordially invited the physicians of the State to meet in convention in Mobile. The invitation was accepted, and the first meeting was held in that city in 1847.

March 25-27, 1873 the present Constitution was adopted in Tuscaloosa.

April 15, 1874, The State Board of Censors rendered its first report.

Dr. Jerome Cochran was elected Alabama's First State Health Officer, April 11, 1879 for a period of five years, with a salary fixed at \$1500.

In 1885, when Dr. Benjamin H. Riggs was president, the desirability of a monthly journal for the association was discussed; and advocated in later years by Dr. Seale Harris, Birmingham, and Dr. W. W. Harper, Selma. July 15, 1931 witnessed the culmination of the plan, when the first number, a magazine of 44 pages, was published.

The Jerome Cochran Lecture was established on recommendation of Dr. L. L. Hill of Montgomery.

Dr. J. T. Searcy delivered the first lecture on "What is Insanity?" in Tuscaloosa.

Dr. Carl A. Grote was appointed the first full time county health officer in Jasper, Alabama in 1912. In 1917, Dr. Grote organized and directed a health Department in Huntsville.

Dr. H. G. Perry was the Association's Secretary from 1915-1923 and its Treasurer from 1898 to 1915.

In 1935 Dr. C. A. Thigpen, Montgomery, was elected President of the Association.

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IN THIS ISSUE

- Clinical Chemistry and Predictive Medicine* . . 1337
Cardiac Resuscitation
 in a Community Hospital 1341
Epidemic of Tinea Capitis
 in Elementary School 1357
1967 National Medico-Legal Symposium . . 1374

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Volume 36 • May, 1967 • No. 11

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19 So. Jackson St. Montgomery, Ala. 36104
Subscription Price \$5.00 Per Year
\$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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CONTENTS

President's Page 1294

The Woman's Auxiliary 1298

Editorial Comment 1300

Dr. Bob Parker—A Tribute 1300

A New President Takes Command 1305

How Sweet It is 1306

The Minimum Wage Case 1306

Around the State 1308

Picture Highlights of
Annual Session 1308

Vital Statistics 1310

Physician Placement Service 1312

Scientific Section 1337

Clinical Chemistry and Predictive
Medicine, E. Cheraskin, M. D.,
D. M. D.; W. M. Ringsdorf, Jr.,
D. M. D., M. S.; A. T. S. H. Setyaad-
madja, M. D., and R. A. Barrett,
D. D. S., Birmingham 1337

Cardiac Resuscitation in a Community
Hospital, Ralph L. Tieszen, Sr., M. D.;
Phillip C. Watkins, M. D.; and Robert
M. Bryan, M. D., Birmingham 1341

Epidemic of Tinea Capitis in Elemen-
tary School, W. S. Pennington, M. D.,
Athens 1357

Alabama Department of Public Health 1361

Pollution of a Vital Resource, Cath-
arine G. Lamar, Montgomery 1361

Association Forum 1370

Emit Luther McCafferty, Jr., Presi-
dent-Elect of MASA 1370

Code-a-Phone Available 1371

Changes at Medical Center 1372

1967 National Medico-Legal Sympos-
ium, T. B. Hill, Jr., Montgomery 1374

Citizenship, Citizens and Circumstance,
Neal S. Flowers, M. D. 1403

The Month in Washington 1417



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References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on file. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: Microbial Agents and Chemotherapy — 1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

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President's Page

Our Association has just completed another successful year—in many ways outstanding—under the most capable leadership and guidance of our outgoing President, Dr. J. O. Finney. He has had his share of difficult problems, but he has attempted to solve them in a statesmanlike manner in the best interest of improved health care for the people of Alabama and our Association. Each of us owe him a great debt of gratitude for his untiring efforts. We are pleased that he will still be actively associated with us during the coming year as a member of our Board of Trustees. We shall continue to seek his advice and counsel.

By the time this is published, appointments for vacancies on all of our standing committees will have been made. We admonish each and every member on all of our committees to dedicate himself to the continuing goals of even greater achievement and advancement of our Association. We earnestly solicit the support and advice of each member of this Association and ask all committee members for their wholehearted support and efforts. We hope that at the end of this administration we will be able to say to all—"Well done, thou good and faithful servant."

To us, the highlight of the preceding year was the special called meeting of the College of Counsellors and House of Delegates on November 6, 1966, when we formally adopted a position on the implementation of Title XIX, established a mechanism for resolving the problem between our organization and Blue Shield of Alabama, and re-organizing the dues structure so that our organization can better do the job it is supposed to do and which our fine membership deserves.



Dr. E. Bryce Robinson, Jr.

Our state headquarters office has the finest, most capable, well-motivated, and loyal staff that we have ever had. We shall call on them many, many times during the year for assistance and we know that they will deliver a full measure of effort and accomplishment.

Another item of note during the past year has been the further step in the organization of and determination of policy on Heart Disease, Cancer, and Stroke Program in Alabama.

Now to the immediate work that must be done. First and foremost is the regular biennial session of the State Legislature. We have a lot at stake with them if we are to continue to improve the health of our citizens. Further financing of our Mental Health Program is sorely needed, as well as for our State Health Department. Of equal importance is the enactment of legislation so that

PRESIDENT'S PAGE

Alabama can implement Title XIX. Our efforts in these endeavors must succeed.

For the first time in its history, in recent months your Association has obtained competent legal counsel. Now that we have this available, it is hard to understand how we got along without it as long as we did.

During the year we have been privileged to attend the monthly meetings of the ten men you have elected to serve as the State Board of Censors. They serve in three capacities: 1) as a State Committee of Public Health; 2) as a Board of Medical Examiners; and 3) as a Committee on Association Affairs when the College of Counsellors and House of Delegates are not in session. We are impressed by the outstanding attendance record at each meeting, by their diligence and dedication to duties, and the many long hours they spend without compensation. We would suggest that each member of this Association make an effort to attend one of their meetings and then we could all be better informed and have a more knowledgeable understanding as to how they function so fine on our behalf.

We deeply appreciate the honor you have bestowed on us in this office as your President. We understand full well that this carries with it great responsibility, many duties, and much work. We are willing to accept these to the full extent of our ability, and with your help, the success of this Association will be certain to continue.

We ask each member of this Association to be a doer and not just a talker; be a participant and not just an onlooker.



E. Bryce Robinson, Jr., M. D., President
The Medical Association of the
State of Alabama

Sparkling Soft Drinks . . .

pleasure for patients who need liquids



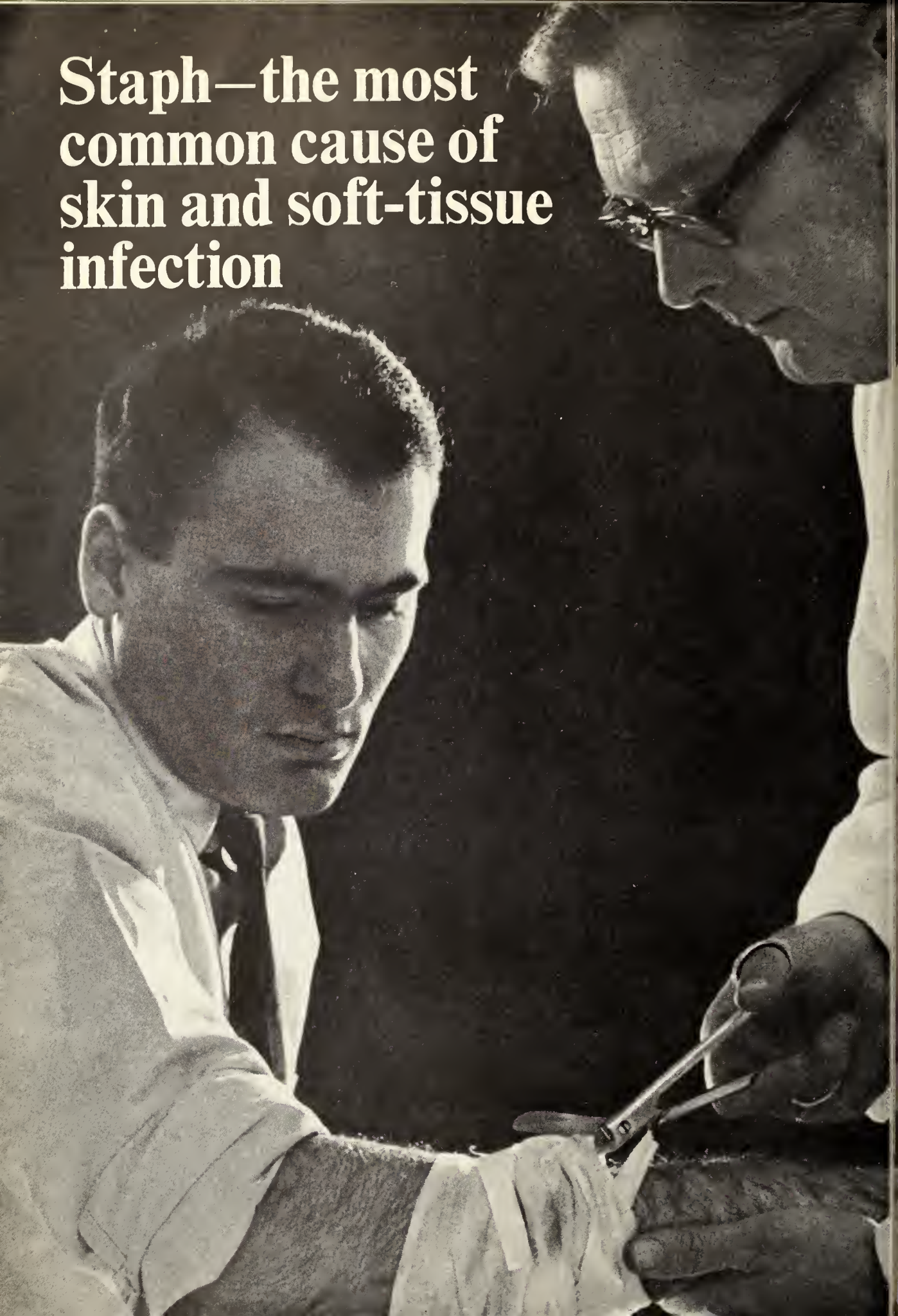
Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

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**Staph—the most
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A suitable dosage form for every staph situation

Staph—the most common cause of skin and soft-tissue infection—also is responsible for many more serious infections, such as pneumonia, osteomyelitis, and septicemia. Often, a seemingly minor skin infection is the source of metastatic spread to deeper structures. When findings on culture incriminate staph as the cause, Prostaphlin (sodium oxacillin) will provide specific effective therapy.

Bactericidal effectiveness. Hardly a staph organism can resist the bactericidal action of Prostaphlin (sodium oxacillin), as shown by a 34-month *in vitro* study. Of all staph isolates tested, 99.5% were sensitive to oxacillin.¹

Clinically proven. There is a high correlation between these *in vitro* findings and clinical results. Of 610 patients treated with Prostaphlin (sodium oxacillin), 89.8% were reported cured or improved, including those with staph infections resistant to penicillin G.² And since resistance does not appear to develop *in vivo*, therapy with oxacillin can be extended when necessary.

Outstanding safety record. Besides being staph-specific and rapidly absorbed—Prostaphlin (sodium oxacillin) has established an outstanding record of safety during five years of widespread clinical use. Continuous high blood levels of oxacillin have not produced toxic effects on kidney function, assuring a significant margin of safety. However, as with all penicillins, the possibility of allergic response should be considered.

Capsules, Oral Solution and Injectable. Prostaphlin (sodium oxacillin) is available in three flexible dosage forms to suit the age of the patient and severity of infection—capsules, an oral solution for pediatric use, and multi-dose vials for injection, I.M. or I.V.

PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY: 8:12.6

References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N. Y. 2. Data on file, Bristol Laboratories.

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Whenever you
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SODIUM OXACILLIN

The Woman's Auxiliary

It is a great honor and privilege to hold the office of President of The Woman's Auxiliary to The Medical Association of the State of Alabama. It is with pride and humility that I accept the duties of this office. I am proud of the confidence your wives have placed in me by electing me to lead them and to represent them in the State and in the Nation. I am humble when I think of the responsibility that comes with this honor and realize that regardless of how high the goal may be set, I can accomplish nothing without the help and co-operation of the physicians' wives of our State. Henry Ford once said: "Meeting together is a beginning, staying together is progress, but working together is success." With Mr. Ford's word as our guide I am confident we shall, with willing hands and thinking minds, work together to reach the goal we set before us.

I am proud of the capable, enthusiastic ladies who will serve with me as officers and committee chairmen. Elected to serve as officers are Mrs. Robert K. Wilson, Sr., President-Elect; Mrs. C. L. Salter, Mrs. J. S. DuBois, Mrs. G. William Wiles, and Mrs. Gilder Wideman, District Vice-Presidents; Mrs. Howard C. Johnson, Recording Secretary; Mrs. Albert Tatum, Jr., Corresponding Secretary; Mrs. Curtis A. Smith, Treasurer; Mrs. Richard A. Dillard, Historian; Mrs. Dixon Meyers, Finance Officer; and Mrs. John M. Chenault, Parliamentarian. Serving as Committee Chairmen will be Mrs. B. H. Johnson, Jr., Mrs. Samuel K. Cohn, Mrs. John Kimmey, Mrs. William Anderson, Mrs. John B. Isbell, III, Mrs. William G. Thuss, Sr., Mrs. Claude Lavender, Mrs. Harvey Searcy, Mrs. Gene Qualls, Mrs. Eugene H. Bradley, Mrs. Fred Reynolds, Mrs. C. E. Kimbrough, Mrs. Morgan J. Moore, Mrs. William D. Monroe, Sr., Mrs. Walter Ford, Mrs. J. Frank



Mrs. James C. Guin, Jr.

Trucks, Mrs. William J. Rosser, Mrs. J. D. Rayfield, Mrs. Charles L. Camp, Mrs. William Noble, Sr., Mrs. Bluitt L. Landers, Jr., Mrs. W. L. Smith and Mrs. Lamar Miller.

Health is our greatest heritage and although there are many organizations interested and concerned with welfare and health, there is none as unique as the one that brings doctors' wives together. We extend to every physician's wife, who is eligible and not a member of the Auxiliary, a cordial invitation to join with us and share the privileges and friendships of this wonderful organization. It is a privilege every doctor's wife should enjoy.

Most sincerely,

Kay Guin

Mrs. James C. Guin, Jr.



Some People Think All Physicians
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Juries, for instance.

They aren't supposed to know how well fixed you are if you're the defendant in a lawsuit. But there's something after your name that tips them off: M.D.

And right or wrong, they tend to see dollar signs if an award goes against you.

It doesn't have to be a malpractice case, either. If a patient slips in your waiting room they'll still call you "Doctor" when the case comes to court.

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Editorial
COMMENT

Dr. Bob Parker—A Tribute

The *Journal* pauses at this time to pay brief tribute to a man whose service to this Association and to the profession of medicine can neither be measured nor adequately described.

Robert S. Parker, M. D., of Montgomery completed 16 years of distinguished service as a member of the Board of Censors at the conclusion of the 1967 Annual Session on April 22, 1967, but there are indications that his services to the profession are far from ended.

No other man in the history of the Medical Association of the State of Alabama has held the high honors which his colleagues have bestowed upon Bob Parker. For many years he was the "strong man" of the Board of Censors, a valuable assistant to the Chairman. In April of 1966, as he began his last year as a member of the Board, he was elected to the Chairmanship and in the ensuing 12 months he guided the affairs of the Board of Censors with a firm and wise hand.

Six months after he was named Chairman of the Board of Censors, he was accorded new honors by the Alabama Board of Mental Health, being unanimously elected Chairman of that body.

To a man of lesser stature the chairmanship of the two major health boards in Alabama would have posed an insurmountable obstacle, but Bob Parker took his new responsibilities in stride. Although the path-



Dr. Robert Parker

ways of public health and mental health often times diverge, the Chairman never lost his perspective and skillfully steered his two boards into a co-operative channel.

Unquestionably, the stature of the Mental Health Department was elevated in the public esteem, and in the eyes of the state government, when Bob Parker became Chairman of the Board. His high standing with the State Administration promises to eliminate the niggardly financial support which this state has accorded to its mental institutions.

(Continued on Page 1305)

"Take a laxative" is a harsh sentence

Although there are more than 60 ethical laxatives available for the constipated patient, many, unfortunately, do not really produce an effect much like a normal bowel movement. Instead they whip the bowel, torment it and leave it irritated, inflamed and exhausted.

On the other hand, Dulcolax

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Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essen-

tial. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

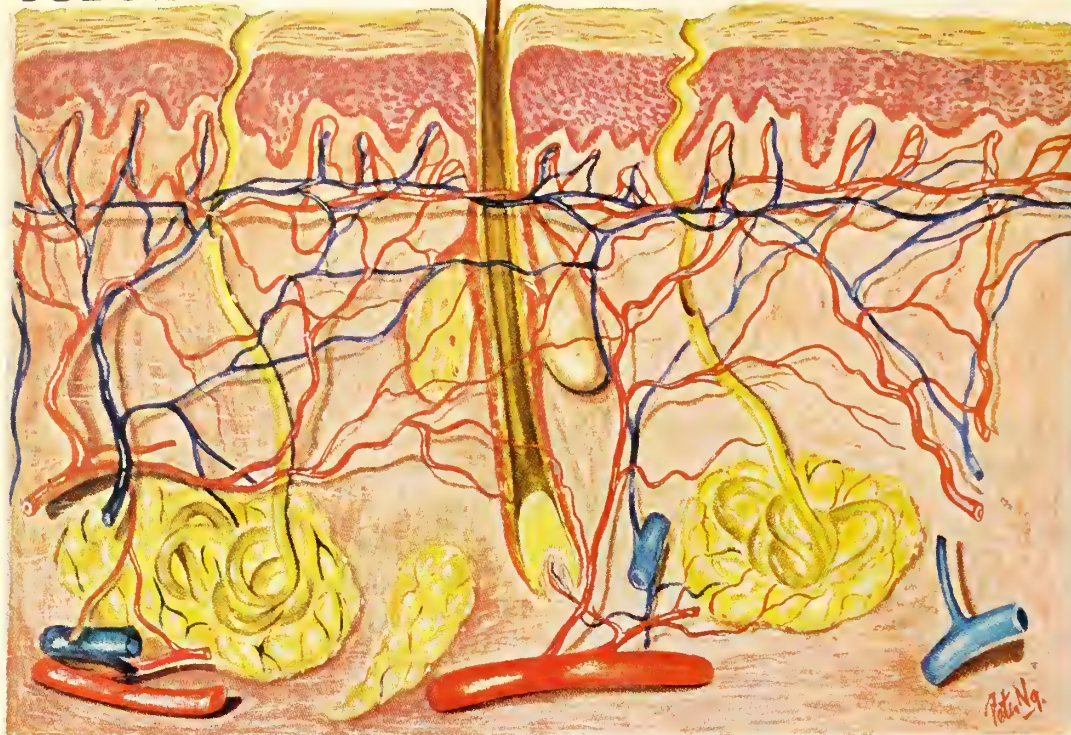
Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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DR. BOB PARKER

(Continued from Page 1300)

At the same time the Board of Censors has expanded its own spheres of operation. It has wrestled with the manifold problems of government intrusion into the health-care field. It has taken the additional funds made available to the Health Department through increased taxes to enlarge the scope of services to the people of Alabama.

In all of these endeavors Bob Parker's influence has been unmistakable.

And while he has been serving the causes of medicine, he has not been negligent of his

civic duties. He has served for many years as a member of the Board of Education, an elected office which illustrates that the people of Montgomery regard him as highly as do his professional associates. He is active in the work of the Young Men's Christian Association, in his church, in the field of medical education, all of these in addition to enjoying a large pediatric practice.

Although few concede the possibility, it would be tragic if medicine lost the service of a leader of the caliber of Bob Parker. His ability to look over horizons into the future is an asset which medicine will need for many years to come.

A New President Takes Command

The new President of the Medical Association of the State of Alabama—Dr. Edward Bryce Robinson, Jr., of Fairfield—dons the mantle of office at a time which many believe to be the most critical period in the history of Organized Medicine.

A veritable avalanche of federal health-care programs, which may already encompass one-half of this nation's population, will occupy much of the time, attention, and energies of the President and leadership of this body. The decisions made within this 12 months may remain to haunt and harass generations of physicians yet unborn.

Dr. Robinson enters upon his duties with many qualifications, not the least of them being his experience as Administrator of a large quasi hospital. He has gained by close experience the knowledge which will enable him to deal with professionals as well as the public, with the bureaucrat and the educator. His long tenure as a member of the Council on Medical Education of the American Medical Association coupled with his service to his own county medical society and to the State Association can produce a

cornucopia of profits to his fellow physicians in Alabama.

Even more will be demanded of this Association leadership in 1967 and the years ahead than was required of those who have previously held this high and honored position. Even more than his predecessors, the President will need the unstinting co-operation of every officer and every member. He will need their counsel; he will need their energy; he will need the prayers of all who cherish the tradition of medicine.

Dr. Robinson is fortunate to have on his team men of the caliber of Dr. Emit Luther McCafferty, Jr., the President-Elect, and the four division vice presidents who can serve effectively as his alter ego in the grassroots.

As in past years it can be considered a certainty that the Board of Censors, the Board of Trustees, and all the standing and special committees of the Association will be responsive to their duties and that when this fiscal year is recorded in history at Birmingham next April, the membership can truly say "Well done!"

(Continued from Page 1305)

How Sweet It Is

Every Saturday night, same time, same channel, a chain-smoking comic with an enormous girth comments: "How sweet it is." We have never been quite sure what is so sweet, but it could well be he is talking about his and most other American's diet.

The U. S. Public Health Service, in a survey on the growing problem of obesity, has come up with some satellite statistics which are a bit startling.

For example, based on the survey, it has been ascertained that the average American today eats more sugar in two weeks than his grandfather consumed in a year. You might drop that into a dull between-drinks conversation some evening.

Another statistic: Americans consume more fat than any other nation in the world. Fat consumption in the 50 states is double that of Russia, which may be just one more reason why they will get to the Moon before we do.

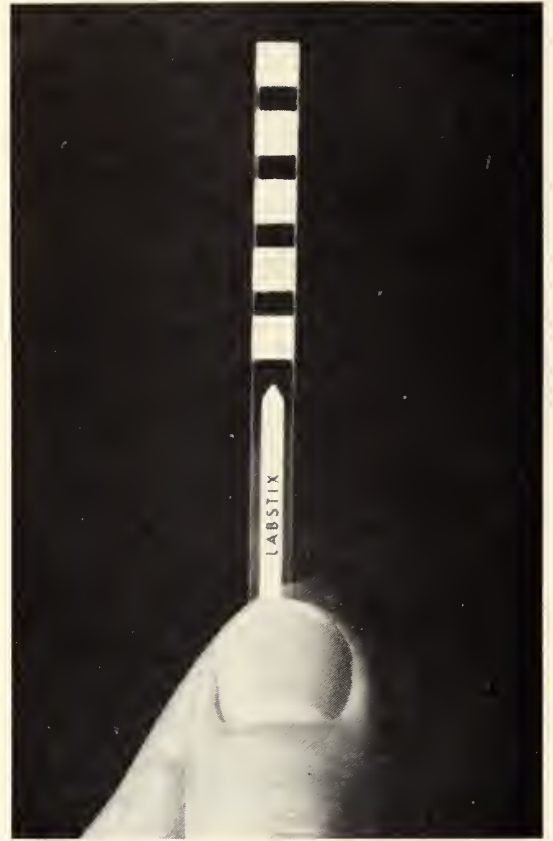
The Public Health Service also came up with yet more figures which will surely renew the never-ending battle of the sexes. It reported that men weigh up to five pounds more today on the average than they did 40 years ago but women weigh from two to six pounds less.

About that latter point there is some room for debate. During the same period in which the Public Health Service claims women were losing weight, the sale of girdles increased enormously. This expansion in girdle sales suggests a corresponding broad expansion elsewhere, the Public Health Service notwithstanding.

The Minimum Wage Case

It has attracted little attention to date, but there is pending before a federal court in Baltimore one of the most critical significant

(Continued on Page 1307)



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LABSTIX® provides 5 important urinary findings*—on a single reagent strip! That's *more* information than you can get from any other single reagent strip. You know the results in just 30 seconds—while the patient is still in your office—and readings are reliable and reproducible. LABSTIX is easy to handle, too. Never goes limp, even when wet, because it's made with clear, firm plastic. And results with LABSTIX are easy to read—color contrast between the test areas and the transparent plastic is clearly defined. An unexpected "positive" from testing with LABSTIX may help in detecting hidden pathology before marked symptoms are manifest.

*Blood; ketones; glucose; protein, and pH.

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THE MINIMUM WAGE CASE

(Continued from Page 1306)

cases in years involving federal-state relations.

At stake is a 1966 amendment to the Fair Labor Standards Act (minimum wage) which brings under the provisions of that law employees of schools, hospitals, nursing homes and institutions for the mentally or physically handicapped.

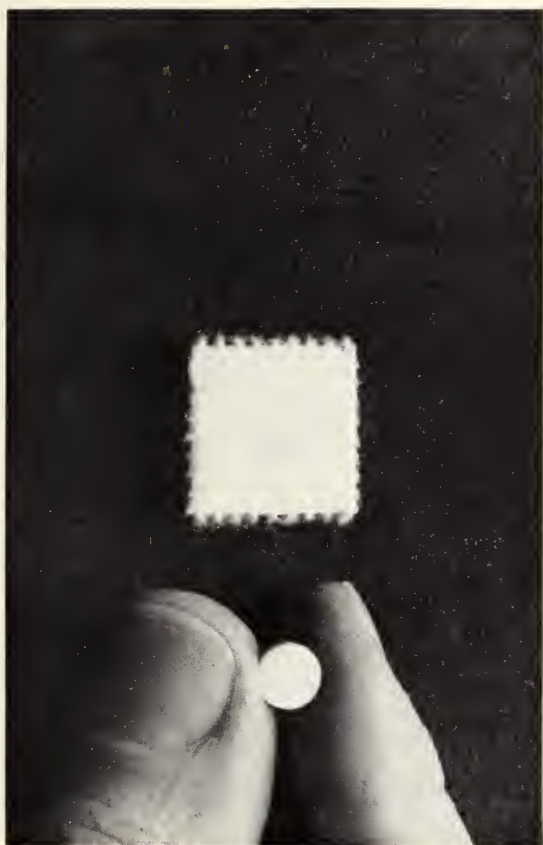
In effect, this law gives the federal government the right to move deeply into state affairs, even to the extent of establishing salaries for at least some state workers.

Atty. Gen. Francis B. Burch of Maryland filed the initial suit in federal court, and he suggested that if any other states were interested they might join with him. He must have been pleased at the response—when the case went to court no less than 25 states (Alabama included) had joined in as parties to the suit.

Atty. Gen. Burch emphasized that he took no issue with the minimum wage per se, but added "the problem is that if the government is right in its interpretation of the law, then the Federal Government is in position to control the states in every conceivable branch of their operations."

Echoing this view was Texas Atty. Gen. Crawford Martin: "If hospitals and schools can be the subjects of regulations, then the public health department, the police, the highway department, even the legislature would be subject to regulation at the whim of Congress."

Perhaps the most astonishing comment to come from the hearing was an exchange between Federal Judge Roszel C. Thomsen and Charles Donahue, U. S. Solicitor. The judge asked Donahue if there was any limit to federal authority. Donahue's reply must have caused the founding fathers of this nation to spin in their graves. Said Donahue: "I don't know . . . there may be one."



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around the state



The registration desk bustled with activity throughout the 106th Annual Session.



The Board of Trustees also had work to do. Going over reports are, left to right, Doctors J. E. Cameron, William Smith, E. Bryce Robinson, and J. O. Finney.



The Board of Censors presented to Dr. Robert Parker a silver candelabra set and a Certificate of Appreciation for his faithful service to MASA from April 21, 1951, to April 22, 1967. Dr. Luther L. Hill made the presentation.



The Board of Censors met constantly considering and solving many MASA programs. Shown, left to right: Dr. Robert Parker, Chairman; Dr. Ira Myers, State Health Officer; Board members Doctors M. Vaun Adams and P. W. Burleson.



We gather together . . . the Board of Censors enjoying dinner at the Montgomery Country Club.



After a long afternoon of setting up exhibits, the exhibitors relax at a reception given by the central office.



One of many scientific sessions covering Heart, Cancer, and Stroke.



The Past Presidents and Fifty Year Club members told some tall tales during a luncheon given by Dr. J. O. Finney.



Dr. E. B. Glenn, Executive Director Bob Ingram, with Governor Lurleen Wallace. Governor Wallace was the principal speaker at the ALAPAC luncheon.



ALAPAC luncheon



Dr. J. O. Finney presenting the William Crawford Gorgas Award to Ed Leigh McMillan, Attorney, from Brewton, Alabama.



Dr. John Hall Nelson, Tuscaloosa, receives the Aesculapius Award from Dr. J. O. Finney. A certificate and \$200 cash prize award are given in cooperation with Mead Johnson Laboratories to the author of the outstanding scientific exhibit shown at the 1967 Annual Session.

See Pages 1322-1323 for more pictures of Annual Session.

Vital Statistics

New Members

Butler County

Stabler, Paul Acker, Oak Street, Greenville, Ala. 36037.

Chambers County

McMurrain, Key David, Jr., Personnel Services Center, Shawmut, Ala. 36876.

Patterson, George Washington, 4505 20th Avenue, Langdale, Ala. 36864.

Coffee County

Herod, Joseph Wheeler, Jr., 207 East Brunson Avenue, Enterprise, Ala. 36330.

Richardson, Robert Earl, U. S. Army Hospital, Ft. Rucker, Ala. 36360.

Conecuh County

Howell, Thomas Robert, Evergreen, Ala. 36401.

Crenshaw County

Vanderhoeven, Desire Virginie, Luverne, Ala. 36049.

Houston County

Duke, James Brooks, 509 West Main Street, Dothan, Ala. 36301.

Field, Mason Dillard, Jr., 1507 West Main Street, Dothan, Ala. 36301.

Jones, Patrick Burrus, Jr., S. E. G. Hospital, Dothan, Ala. 36301.

Jefferson County

Bedsole, Donald Oliver, Lloyd Noland Hospital, Fairfield, Ala. 35064.

Bryant, Robert Ernest, Jr., 1120 Ford Avenue, Birmingham, Ala. 35217.

Ceballos, Ricardo, 1919 South 7th Avenue, Birmingham, Ala. 35233.

Cezayirli, Cemil, 7000 5th Avenue South, Birmingham, Ala. 35212.

Howe, Robert Edgar, 1529 North 25th Street, Birmingham, Ala. 35234.

Kirklin, John Webster, 1919 South 7th Avenue, Birmingham, Ala. 35233.

Leach, William Bernard, 1919 South 7th Avenue, Birmingham, Ala. 35233.

Miller, Robert Edward, 1919 South 7th Avenue, Birmingham, Ala. 35233.

Lauderdale County

Bennett, Ann, 416 North Seminary Street, Florence, Ala. 35630.

Lee County

Klinner, Kent Vernon, Jr., 1995 Pepperell Parkway, Opelika, Ala. 36801.

Madison County

Carlisle, Bob Byron, Medical Arts Building, Huntsville, Ala. 35801.

Knox, George Edwards, 719 Franklin Street, Huntsville, Ala. 35801.

Plott, Dwight Morgan, 410 Lowell Drive, Huntsville, Ala. 35801.

Stewart, Robert Edly, Medical Arts Building, Huntsville, Ala. 35801.

Marshall County

Cooper, Wiley Howard, III, 112 Apple Street, Albertville, Ala. 35950.

Tucker, Olon Clinton, Grant Clinic, Grant, Ala. 35747.

Tuscaloosa County

Daly, Edgar Martin, 819 4th Avenue, Tuscaloosa, Ala. 35401.

Richardson, Luther Washington, Jr., 205 9th Street East, Tuscaloosa, Ala. 35401.

Standeffer, William Carter, 400B 10th Street East, Tuscaloosa, Ala. 35401.

Deaths

Allgood, Homer Wilson, Sr., 5056 Parkway, Birmingham, Ala. Deceased August 22, 1966. (Jefferson County Medical Society.)

Burdeshaw, Henry Beechum, P. O. Box 1605, Dothan, Ala. Deceased February 26, 1967. (Houston County Medical Society.)

Transfers

Miree, Aubrey Stinson, III, formerly Birmingham, Ala., to Room 105 Wilson Building, 206 South Pine Street, Florence, Ala. 35630. (Transfer from member Jefferson County to Member Lauderdale County Medical Society.)

Karrh, Bruce Wakefield, formerly Winfield, Ala., to Sanders Street, Athens, Ala. 35611. (Transfer from member Marion County to Member Limestone County Medical Society.)

Changes of Address

Etowah County

Gillespie, J. P., Jr., present Gadsden, Ala., to 1314 Bellevue Drive, Gadsden, Ala. 35901.

Jefferson County

Carmichael, Daniel E., present Birmingham, Ala., to 1919 7th Avenue South, Birmingham, Ala. 35233.

Davis, Harwell G., II, present Birmingham, Ala., to Box 301, Fairfield, Ala. 35064.

Scott, Edgar M., Jr., present Birmingham, Ala., to 1750-C Woodcrest Road, Birmingham, Ala. 35205.

Smith, Chandler H., present Birmingham, Ala., to 2500 Glendmere Place, Birmingham, Ala. 35216

Madison County

Bland, Anna Nell, present Huntsville, Ala., to 1651 West Laurel Avenue, Knoxville, Tenn. 37916.

Cameron, William B., present Huntsville, Ala., to 930 Franklin, Huntsville, Ala. 35801.

Smith, Mary Joyce, present Huntsville, Ala., to 930 Franklin, Huntsville, Ala. 35801.

Warren, Charles Franklin, present Huntsville, Ala., to 930 Franklin, Huntsville, Ala. 35801.

Mobile County

Cobb, Jephtha B., present Mobile, Ala., to 12 Turnout Lane, Mobile, Ala. 36608.

Martin, Henry F., present Mobile, Ala., to 762 St. Michael Street, Mobile, Ala. 36602.

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1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311 (Feb.) 1953.



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Age 32; married; University of Arkansas 1961; Board eligible; seeking group or industrial practice. Available August 1967. LW-99

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Age 33; married; University of Pittsburgh 1960; Board eligible; seeking associate practice. Available July 1967. LW-101

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Age 36; single; Medical College of Alabama 1957; Board eligible; seeking group or associate practice. Available immediately. LW-103

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Town with 2,350 population in East Central Alabama. Clinic available. Excellent recreational facilities near lakes. PW-62

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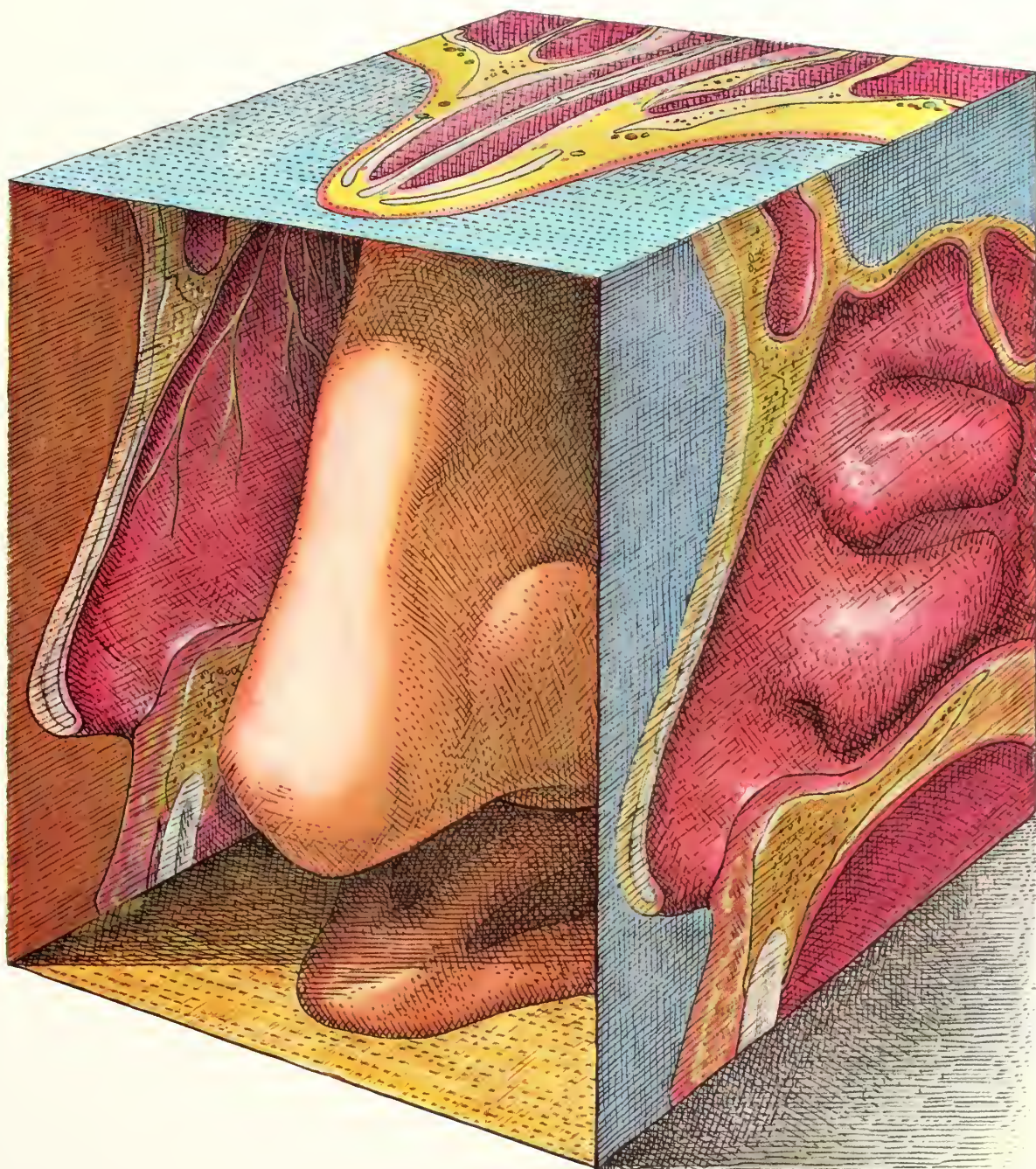
For partnership. Board eligible or Board qualified. In city of 35,000 population located in Northeast Alabama. PW-67


DORSEY

spring 1957

Season

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this issue: the ubiquitous world of  summer allergies



the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.¹ The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

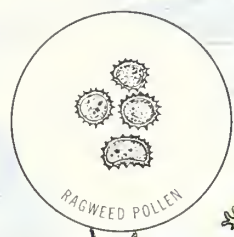
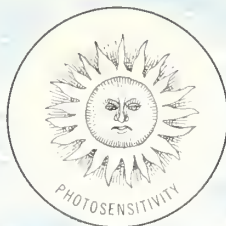
Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.² The entire tree season starts about April 1 and ends about Memorial Day, al-

though all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.³ Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.⁴

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is *Alternaria*—the kingpin of the molds—that meets a sudden demise with the first frost. *Alternaria*-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, *Alternaria* counts are at their highest, perhaps associated with the burning of leaves. Other molds such as *Hormodendrum* and

Helminthosporium are associated with the warmer weather, as opposed to *Penicillium* and *Aspergillus* which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.⁵ Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.⁶ Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

to relieve  summer allergies

Triaminic®

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.⁷ Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.⁸ It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

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How can he be a sport with a runny nose?



For summer allergies, summer colds, or nasal congestion due to almost any cause, you prescribe quick r-e-l-i-e-f with Triaminic. It's ideal for summer allergies:

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Allergies Are Not To Be Sneezed At

Every year a wave of misery sweeps the land—borne by an invisible sneeze-provoking cloud that stings the eyes and stuffs the nose.

Usually from mid-August until autumn chills the air, millions of Americans are caught up in a wheezing, coughing, nose-blowing, eye-wiping fit known as hay fever and caused by plant pollens, particularly those sown in the breeze by ragweed.

While virtually unknown in Europe and most other parts of the world, hay fever appears to be a growing medical problem in this country. One allergy expert speculated that the increases in respiratory allergies may be due to economic factors. Land once under cultivation is now being allowed to revert to weeds, the dusty-topped members of the Ambrosia (ragweed) family among them. Others believe the upsurge may stem from the fact that so many Americans lead such cocooned lives they never build up any natural immunity through gradual contact with pollens.

Plant pollen undoubtedly is the most publicized cause of allergic reactions. Many newspapers and radio stations keep daily track of the pollen count during the summer. But it is by no means the only source, and perhaps not even the most common when you consider that ordinary household dust may produce hay fever-type symptoms just as readily as pollens. Nor are allergies confined to the respiratory system. They have been triggered in various parts of the body by a myriad of things ranging from food, clothing, plastics and metals to insect hairs, cooking odors, heat or cold and modern wonder drugs.

Dr. Richard A. Kern of Philadelphia, a specialist in the field, says about 40 to 45 per cent of Americans are believed sensitive

in at least some degree to one or more allergens (allergy producing agents).

Why is it that some people are "allergic" and others not? There is no definite answer yet. It has been found, however, that allergies appear to be tightly connected with our internal, involuntary defense system—the mechanisms and materials the body rallies to protect itself.

Sneezing, for instance, is an attempt by the body to forcefully expell an irritant, such as a pollen grain which has settled in the nasal passages. If the bit of pollen is blown out, all well and good. If not then another defense maneuver starts. The tissues swell to emit heavy discharges of mucus in an effort to wash out the irritant. Should this prove futile, the sneezing and mucus discharge continues and you begin to have the classic symptoms of hay fever.

Just why a substance such as pollen should severely irritate one nose and not another isn't really clear yet. But it may be that in some people the pollen and mucous membrane form a strong chemical bond, while in others the body chemistry is slightly different and no bond takes place.

On the other hand, it may be that the pollen merely sets in motion other chemical reactions which the body resists. It is known, for example, that when an allergy-producing substance is present body cells emit an abnormal amount of histamine. This chemical, found in all tissues, is probably a part of the body's defenses. It causes the small blood vessels to expand, which in turn enables them to carry more blood to the affected part.

Some specialists think that an allergic person may react to his own histamine. Drugs which suppress the production of this chemical have been used effectively to control body reactions to allergens.

By far the most perplexing allergy ex-

A Science Feature Article prepared by the Communications Division, American Medical Association.

perience by physicians today is that produced in some people by life-saving drugs such as antibiotics, vaccine serums and the hormone ACTH.

These drugs are injected into the body to fight disease. But the body doesn't realize this. To the body such drugs are a foreign substance and therefore must be expelled or neutralized.

To do this, the blood and/or lymph cells produce special chemicals known as antibodies. These are precisely tailored to neutralize one particular type of invader. Normally the whole reaction is routine. The right antibody is produced, the drug eventually is neutralized (although not before it has accomplished its intended work), and all returns to normal.

In a few individuals, however, the introduction of a certain drug produces within the body a state of high sensitivity. When this occurs, subsequent shots of the same drug can produce shock, unconsciousness, coma or death.

It has been speculated that in such cases the body produces too many antibodies, manufactures the wrong kind or delivers them to the wrong place in the body. It is also possible that the body in effect becomes allergic to its own antibodies.

Food is another frequent cause of allergic reactions. These can range from mild indigestion, skin rashes or hives to death. Dr. Jerome Glaser of the University of Rochester notes there is growing evidence that perhaps a few unexplained infant deaths may be caused by an allergic reaction to cow's milk.

Normally food proteins, which seem to be the cause of digestive allergies, are broken down in the process of digestion. But if a person's body isn't capable of breaking down a certain protein in a certain food then a reaction may result.

The skin is another area, frequently susceptible to allergies. Such allergies, Dr. Kern said, appear to develop more readily when

the skin is wet. Thus a baker's hands may become allergic to the flour in the dough he kneads, or a housewife's hands to the detergent in her dishpan.

Evidence is strong that allergies are a combination of heredity and environment. "Heredity," said Dr. Kern, "accounts for the inborn quality of easy sensitization. Environment overwhelmingly determines the things to which a person becomes sensitive."

A sensitive person, he notes, is often susceptible to more than one allergen, as if the condition is a general weakness. Thus a city dweller known to be allergic to cucumbers, may find that down on the farm he is allergic to chicken feathers as well.

It has been estimated that there are nearly 17,000,000 cases of allergy in the United States. Of these, hay fever afflicts about one person out of 20.

There are a number of other common respiratory allergies quite similar to hay fever, except they are caused by an allergen other than pollen. This often makes for a more troublesome ailment since there is no "off season" as there is for hay fever.

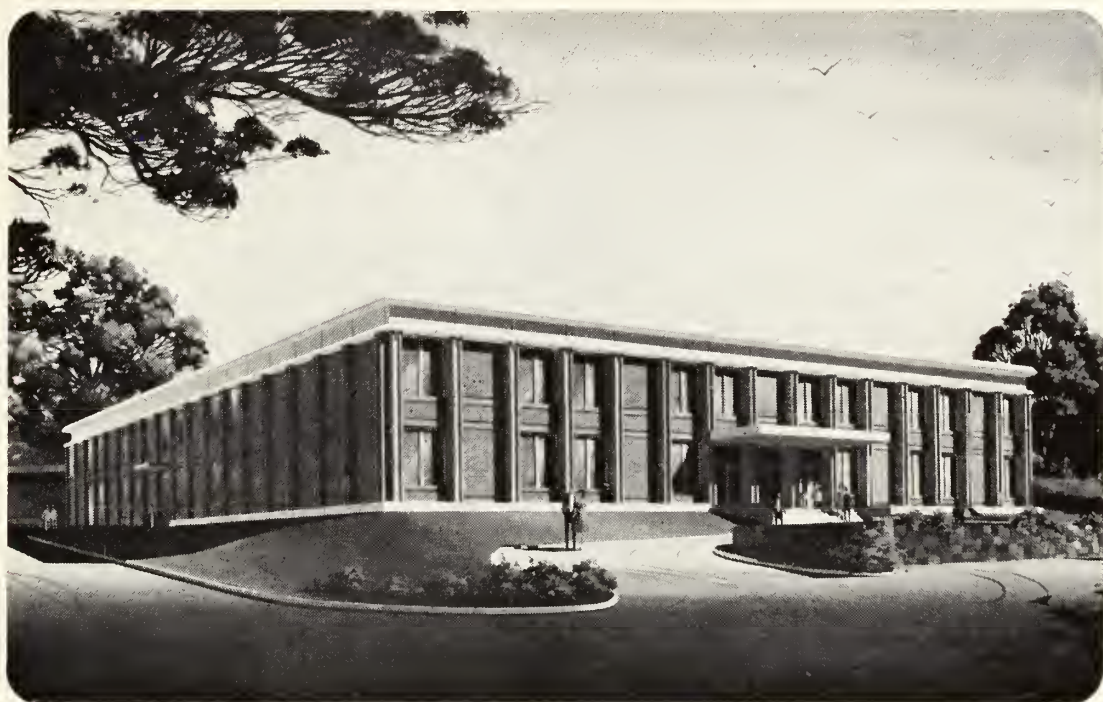
In general hay fever and similar conditions are merely miserable. But there is a hidden danger—asthma.

Asthma is the most serious of the common allergic diseases, responsible for perhaps 10,000 deaths annually, according to one estimate.

In asthmatic cases, the irritation, which may start in the nasal passages, proceeds into the bronchi—the air passages leading to the lungs. This causes the bronchi to constrict so that the victim has difficulty breathing. The lack of breathing capacity in turn may overtax the heart.

Medicine didn't really begin to come to grips with allergies until about the turn of the century, principally because they were so little understood and so difficult to rec-

(Continued on Page 1320)



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The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

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ALLERGIES ARE NOT

(Continued from Page 1318)

ognize. Even today it may take months of testing to determine what touches off an allergic reaction. Sometimes the cause is never found.

The test method usually employed is to implant a bit of the suspected allergen in the skin. If a reaction takes place—swelling and inflammation—then it is pretty certain that the patient is allergic to that substance.

Such tests while not foolproof, often enable a physician to determine in advance whether his patient is allergic.

When the cause of an allergy is discovered, it frequently becomes possible to clear up

the condition by administering minute doses of the allergen so that the body gradually can build up immunity.

When treatment isn't possible, however, the only avenue of escape is to stay clear of the allergen. This can be rather difficult. People allergic to grass sometimes have to remain indoors in an air-conditioned climate. And a person allergic to such foods as wheat flour, eggs, milk, or even cooking odors, can find life quite a trial.

"For some reason," complained one sufferer, "people seem to think the victim of an allergy makes the butt of a good joke. But when you're even allergic to the tissue you use to blow your nose, believe me it's not very funny."

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She simply sits while the party goes on around her, already used to being the girl who is left out. She tries to lose weight—but her emotions won't let her. She becomes irritable and depressed when she doesn't eat, and anxious when she considers her future. So each time she gives up.

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No . . . It's not a debate or filibuster. It's Dr. W. F. Reynolds, President of the Medical Society of Montgomery County and Host to the Association, and The Honorable Earl D. James, Mayor of the City of Montgomery, welcoming the 106th Annual Session doctors to Montgomery.



President of WAMASA, Mrs. Ira B. Patton, Oneonta, gives her yearly report at the orientation session.



I wonder what it tastes like . . . seems to be the question one lady expresses at one of many luncheons attended by the ladies of the Woman's Auxiliary.



The Punch Line! The WAMASA ladies toured the Central Office and enjoyed refreshments. Shown, left to right, Mrs. Nancy Qualls, Mrs. Vickie Cunningham, Mrs. Louise Thuss, and Mrs. Ruth Arnold.



Mrs. C. C. Long, President, National Woman's Auxiliary; Mrs. John M. Chenault; Mrs. James C. Guin, incoming President of WAMASA; and Mrs. Walker Sorrell, President, Montgomery Woman's Auxiliary, at the head table.



We could have danced all night . . . The Scroll and Key Club held its annual function Friday evening and the above couples proved they could really cut a rug. Shown, left to right, are Dr. and Mrs. M. Vaun Adams, Dr. and Mrs. Archie Thomas and Dr. and Mrs. Price.



As Drs. Finney, Parker, and Wm. L. Smith presided at the Saturday Business Session, these doctors followed the reports to be sure nothing was overlooked.



It's all yours. As the last official act, outgoing president of MASA, Dr. J. O. Finney, passes the gavel to incoming president, Dr. E. Bryce Robinson.



Newly elected officers (left to right, front row) Dr. John M. Chenault, Chairman, Board of Censors; Dr. Emit L. McCafferty, Jr.; Dr. John W. Davis, Jr.; Dr. Leon Hamrick; Dr. H. H. Hutchinson; Dr. William L. Smith. Back row, left to right: Dr. O. Emfinger; Dr. M. Vaun Adams; Dr. J. O. Collier; Dr. Sidney Williams; and Dr. Paul Burleson.

WANTED—

Part-time or Full-time Positions for Retired Physicians.

At its meeting in Las Vegas, November 1966, the House of Delegates of the American Medical Association adopted the following resolution:

“Resolved, That the American Medical Association take measures to insure the attention of medical societies to the need for appropriate utilization of retired physicians and inactive nurses.”

AMA's Physicians' Placement Service is presently considering the development of a special service within its overall existing activities to implement the intent of this resolution. A rough estimate indicates there are approximately 2,600 women physicians not practicing and 8,500 other physicians who have retired.

Many retired or non-practicing M. D.'s have found employment on a part-time basis with life insurance companies, in V. A. hospitals, in emergency rooms, as consultants at public hospitals and agencies, with voluntary health agency programs, in developing community health centers, as school health physicians, and even in some private practice situations.

The Placement Service wants to develop (1) a roster of available opportunities for full or part-time physician employment, and (2) a list of physicians interested in returning to limited practice or service.

County medical societies are encouraged to survey the opportunities and interested physicians, either formally or informally, and to transmit the information to promote this new project to the central office of the Association.

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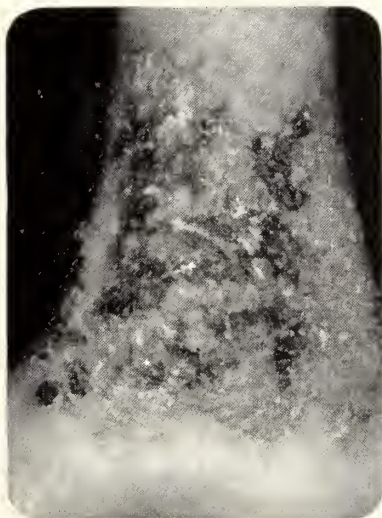
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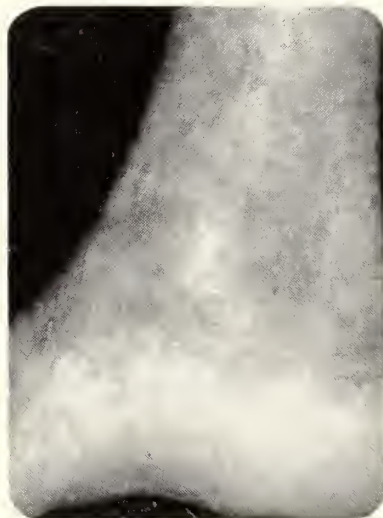
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ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

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Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side

effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyoderma will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

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Prominent Educator to Open NLN Convention

The program of the National League for Nursing Convention in New York will open Monday morning, May 8, with a keynote address by John S. Millis, Ph. D., president of Western Reserve University and chairman of the Citizens Commission on Graduate Medical Education.

Following days of the week-long convention will feature many other notable figures in health and education as the program develops various facets of the convention theme, "Nursing in the Health Revolution."

A film program featuring a new movie premiere and one of the largest educational exhibits to be staged at a League convention are also scheduled.

The League membership will also vote on bylaws changes for reorganizing the League.

The convention runs from May 8 to 12 with major sessions at the New York Hilton Hotel. The National Student Nurses' Association Convention, May 4-7, immediately precedes the League meeting.

A name much in medical news as chairman of the national commission which recently issued the "Millis report" recommending sweeping changes in medical education, NLN's 1967 convention keynoter is an active participant in national and community education affairs. Dr. Millis served on the NLN Board of Directors from 1955 to 1964, including a four-year term as second vice-president. He has been a member of the NLN Committee on Perspectives since its inception, and of a number of other League committees.

Each morning of the convention will be devoted to general assemblies, with luncheons, afternoon and evening sessions reserved for business meetings and programs of special interest groups.

Tuesday morning's session will deal with "Reorganizing to Meet New Health Goals,"

with these speakers: William L. Kissick, M. D., chief, Division of Public Health Methods, Public Health Service, Department of Health, Education, and Welfare; Jane Keeler, R. N., director, Visiting Nurse Association, New Haven, Conn.; and Martin Cherkasky, M. D., director, Montefiore Hospital and Medical Center, New York City.

Manpower and technology join forces as the program topic for Wednesday morning when "Nursepower, Computer, and Compassion" will be aired by Frank J. Johnson, marketing manager, IBM Corporation; Eli Ginzberg, Ph. D., director, Conservation of Human Resources Project, Columbia University; and Mrs. Elmina M. Price, R. N., St. Paul.

Industry's role in fostering and providing community health services will be the focus of an open-to-all Wednesday evening program on "Health Services—the Price Tag and the Dividends." This session features a symposium on which Everett H. Bellows, vice-president, Olin Mathieson Chemical Corporation, and Clifford H. Keene, M. D., vice-president, The Kaiser Foundation, will speak.

Jerrold R. Zacharias, Ph. D., professor of physics, Massachusetts Institute of Technology, and Mary F. Liston, Ed. D., R. N., dean School of Nursing, The Catholic University of America, speak on "Training and Retraining for a New Day in Health" Thursday morning.

Friday focuses on the future with speakers representing many scientific, health, and education interests transmitting "Signals from Beyond the Year 2000."

NLN's interdivisional councils and the advisory service on tuberculosis nursing are jointly sponsoring two evening programs on nursing and family care of infants and children. Another evening session will be de-

voted to clinical research in nursing. One evening—Thursday—is free for theatre-going, shopping, or sightseeing.

The full convention program will appear in the March issue of *Nursing Outlook*, NLN's official magazine.

The local cooperating committee, under the chairmanship of Mrs. Ruth Bergamini, has organized a corps of volunteers for the convention to welcome NLN visitors and make them feel that New York is "indeed, a wonderful place to visit."

Registration for the convention begins on Sunday, May 7. Members and guests planning to attend the 1967 NLN Convention are urged to make hotel room reservations as soon as possible. Application forms for housing through the New York Housing Bureau, appeared in the December issue of *Nursing Outlook* and are also being mailed to all NLN members.

Sex Education Expert Featured Speaker At Auxiliary Convention

Mary Calderone, M. D., noted proponent of sex education, will be one of the speakers at the 44th Annual Convention of the Woman's Auxiliary to the AMA, June 18-22, in Atlantic City. Convention headquarters will be the Shelburne Hotel.

Dr. Calderone's talk, "Sex Education: Goals and Means," is scheduled for Tuesday morning, June 20, according to Mrs. Asher Yaguda, Newark, N. J., Auxiliary president.

Also speaking on Tuesday will be Charles L. Hudson, M. D., AMA president. Dr. Hudson's talk will be made at the luncheon honoring Auxiliary past presidents and AMA officers and trustees. The Auxiliary's contribution to AMA-ERF will be presented at that time, as well as awards to county and state AMA-ERF winners.

Mrs. Yaguda and Mrs. Karl F. Ritter, Lima, Ohio, president-elect, will be honored at a reception Sunday, June 18. Mrs. Ritter will be installed as president Wednesday, June 21.

Other convention highlights will be "The Little Workshop," a question-and-answer session on Auxiliary programs, and reports on community service, international health activities, health careers, legislation, mental and rural health and safety-disaster preparedness projects. State auxiliary presidents will discuss outstanding local programs at the Monday and Tuesday sessions.

The Auxiliary will also sponsor a teen-age program for children of physicians and guests attending AMA convention, held concurrently with the Auxiliary meeting. A Sunday afternoon mixer and pool party are among the events planned.



"Thyroid, I guess."

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Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

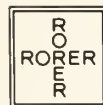
Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.

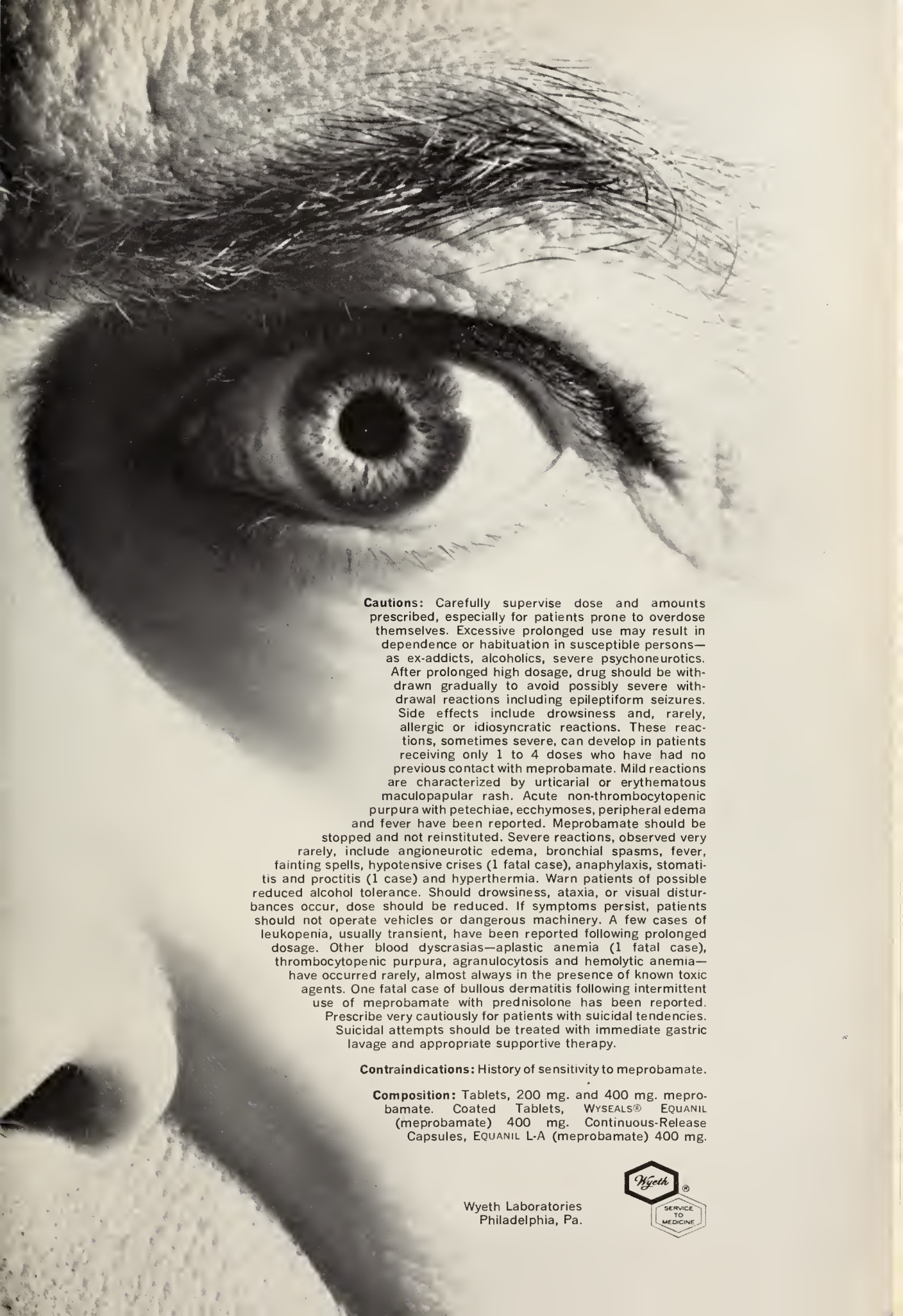


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Medical Motion Pictures, Color TV To Again Be Features At AMA Annual Convention

Medical motion pictures and color television will be a feature of the Annual Convention of the American Medical Association again this year.

The Convention is to be held in Atlantic City June 18-22, the Scientific Program at Convention Hall and nearby hotels and the House of Delegates at the Chalfonte-Haddon Hall Hotel.

Medical motion pictures have become an integral part of the Annual Convention program. Movies are carefully screened and selected for quality, content and diversity of subject matter. Some are chosen from the AMA library of medical motion pictures while others are picked from among films just completed. Several new films are usually shown for the first time at the Annual Convention. The total movie program is thus planned to achieve both variety and currency.

Medical motion pictures will be presented daily. At least five color television programs will be presented live, on a closed circuit from a Philadelphia hospital in cooperation with the University of Pennsylvania School of Medicine.

Several of the Scientific Sections will participate in this year's color television program.

The entire Scientific Program for the 1967 Annual Convention will be published in the May 8 issue of the Journal of the American Medical Association.

Today's Health Guide Into Third Printing

Today's Health Guide, the American Medical Association's fast-selling manual of health information, has gone into its third printing, and is now available in book stores.

Still priced at \$5.95, the 640-page book is a compendium of information designed to help the family make the best and most economical use of health services. More than 250,000 copies have been sold.

Today's Health Guide has 90 chapters, each dealing with an important aspect of health in the family. It is illustrated by hundreds of easy-to-understand drawings, including "trans-vision," or full color "see-through" drawings, of the organs and systems of the human body.

This is not an old-fashioned "doctor book." A non-profit project of the AMA, the health guide is designed to furnish the latest information at a time when medical knowledge is increasing rapidly.

The guide is the product of many doctors and allied scientists. More than 200 people had a role in its preparation—practicing physicians and specialists, dentists, veterinarians, clergymen, chemists, physicists, nurses, educators, engineers, safety experts, writers, reviewers, and members of the AMA staff.

Possessing and reading a book won't enable a person to bring modern medical procedures into the home, AMA spokesmen stress. The book helps the homemaker create an atmosphere, a "climate" in the home in which health will be favored, disease, discouraged, and life prolonged and enriched.

Today's Health Guide is available through your bookseller or by mail order from the American Medical Association, 535 North Dearborn St., Chicago, Illinois 60610, for \$5.95. Check or money order should accompany each order.

AMA Journal Establishes Medicine-Religion Department

Physicians have long been troubled by the knowledge that playing the role of healer sometimes requires them to "play God," too.

Consider this case:

A 10-year-old Louisiana boy is dying from kidney disease. The physician knows it's possible to transplant a kidney from the boy's healthy twin brother, leaving the healthy twin with one kidney.

Sometimes the operation fails, but in a number of cases, it succeeds; more than 500 people are alive today with transplanted kidneys.

Regardless of whether the sick boy recovers, however, the physician is haunted by one thought: suppose something goes wrong with the healthy twin's remaining kidney. A person can live a normal life with one kidney—that's what supports the theory of transplantation from live donors—but one cannot live without any kidneys. Disease could cut down the boy at any time.

By deliberately removing a healthy, functioning part of the boy's body, has the physician consigned him to possible future death?

Or are the parents responsible? They gave permission for the operations. Was the physician merely a technician, carrying out their orders?

And what of the healthy boy? He's a minor. Does he have any rights in the matter? Could there be a case in which parents used unusual coercion on such a child to save the life of another?

These are some of the questions that trouble medical men of conscience on transplantation. Other areas of medicine present similar questions of ethics and morality.

This is why the Journal of the American Medical Association is beginning a new section, "Medicine and Religion," designed to discuss these issues. The first question-and-

answer section (on transplantation) appears in the April 10 Journal.

Here's part of what Joseph E. Murray, M.D., a Boston surgeon, had to say about the problem of the 10-year-old twins:

"Organ transplants, as a therapeutic maneuver to prolong life, are certainly justified as far as the recipient is concerned.

"The source of the kidney, however, provides a major moral, legal, and ethical problem," Dr. Murray said. "If the source is a recently deceased individual whose nearest relatives have voluntarily donated the kidneys, there is no problem. If the source is an elective (kidney removal) for the benefit of another human being, and a kidney is used which would otherwise be discarded, again, there is no problem. However, when the donor is a living healthy volunteer, either a member or a nonmember of the family, a definite problem arises. Here we are embarking on a major surgical operation with a slight, but definite, risk from anesthesia, operation, or postoperative complications.

"This procedure is not for the benefit of the person being operated on, but for someone else. All previous medical and surgical training has been geared to weighing the advantages and disadvantages in any one patient of a proposed therapeutic measure. In this instance, however, for the donor a physiological deficit will always occur, and no possible good can accrue to him physically."

Dr. Murray pointed out, however, that the kidney donor may derive "a certain spiritual benefit" from the donation, which is "probably the purest form of charity next to the giving of one's life."

"For a truly unpressured volunteer, this spiritual satisfaction can more than compensate for the physical trial of a nephrectomy."

The courts in various states have recog-

nized the validity of a kidney donation by a minor child "on the principle that the child would be harmed psychologically, spiritually, and aesthetically if he were deprived of the opportunity of donating a kidney to save his identical twin," Dr. Murray said.

The question concerning the twins' kidney exchange came from a Louisiana physician, who requested the opinion of a priest because the family is Catholic.

Said the Rev. John J. Lynch, of Weston, Mass.: "It should first be noted that on the question of organic transplantation *inter vivos* (from one living person to another), the Roman Catholic church has never yet declared an official teaching."

Private theologians, however, have been discussing the problem ever since transplantation became a medical practicality, Father Lynch said.

"Those who challenge the permissibility of this form of organic transplantation do so because of a sincere conviction that only when it is necessary for one's own total medical good may one sacrifice a bodily member," he said. "In substantiation of this premise they are able to cite several papal statements which seem to concur with their position. And since the donor in a transplant transaction has physically only loss to show for his pains, this school of thought concludes—most logically, if their premise be granted—to a prohibition against the procedure.

"Those who defend the . . . procedure deny the . . . principle which would allow bodily mutilation only for the total good of the patient himself. They maintain that the law of fraternal love—whereby one may do for another whatever one may legitimately do for self—can also be invoked in justification of certain organic transplants. Their reasons, though weighty, are not altogether conclusive theologically; but neither are the contrary arguments submitted by the opposition," Father Lynch said.

Where does this theological deadlock leave

the conscientious physician—in this case, the Roman Catholic physician?

"On the supposition that proper consent is obtained, it leaves him entirely free to follow in practice, if he so chooses, the opinion which grants him the greater liberty of medical action," Father Lynch said. "No theologian could legitimately accuse of moral wrongdoing the physician who involves himself professionally in organic transplantation with due regard for those precautions which sound medical sense would prescribe for that procedure.

"Or, to put it more positively, the doctor, who in medical prudence seeks to preserve human life by means of organic transplantation can merit no less theologically than he does scientifically," Father Lynch said.

In coming weeks, the Journal's Medicine and Religion section will discuss such topics as the relationship of psychiatry and religious counseling in caring for the hospitalized patient, and the role of physicians and clergymen in maintaining the patient's privacy while giving him maximum care. Physicians and clergymen of various religious faiths will discuss these questions.

The AMA's Board of Trustees established a Committee on Medicine and Religion in 1963. Under the direction of the Rev. Paul B. McCleave, subcommittees have been set up in medical societies in every state.

"The primary purpose was to create a climate in which doctors and their clergymen colleagues—ministers, priests, and rabbis—could work together most effectively," a Journal editorial said. "At the bedside and in conferences, they are trying seriously to explore their mutual role in treating the whole man as they deal with his physical, mental, and emotional disorders. Scores of dialogues among physicians and between physicians and the clergy are taking place."

"Hopefully, physicians engaged in all of the many facets of American medicine will be stimulated to send in questions pertaining to this fascinating field," said Paul S. Rhoads,

M. D., Chicago, chairman of the AMA Committee on Medicine and Religion.

Physicians' queries should be based upon specific clinical situations or social problems, and details should be limited to nine or ten sentences. Queries should be sent to Dr. Alfred Soffer, 535 N. Dearborn St., Chicago, Illinois 60610.

Training Program Initiated

A training program in medical librarianship and communication in the health sciences will be initiated by the School of Library Science of Western Reserve University in July 1967 with the support of a five-year grant of \$377,915 from the U. S. Public Health Service through the Extramural Program of the National Library of Medicine. The program, leading after one year to the degree of M. S. in Library Science, will provide training in both traditional and automated methods of information processing and dissemination within the context of medical

libraries, organization of health care and medical research.

In addition to courses in information retrieval systems, library automation, and information centers and services, trainees will be offered a specialized sub-curriculum in which they will be introduced to the objectives, organization and functions of the several types of health sciences libraries. The program will utilize the resources and facilities of the School of Library Science and its Center for Documentation and Communication Research, the School of Medicine and the Cleveland Health Sciences Library on the Western Reserve University campus.

Six stipends of \$2,400 plus dependency allowance and full payment of fees will be available to applicants of excellence and potential.

For further information contact the Program Director, Professor Alan M. Rees, School of Library Science, Western Reserve University, Cleveland, Ohio, 44106.

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

May, 1967

No. 11

Clinical Chemistry and Predictive Medicine*

by

E. Cheraskin, M. D., D. M. D.**

W. M. Ringsdorf, Jr., D. M. D., M. S.***

A. T. S. H. Setyaadmadja, M. D.****

and

R. A. Barrett, D. D. S.*****

Department of Oral Medicine
University of Alabama Medical Center
Birmingham, Alabama

Introduction

Historically, clinical chemical tools have served largely for *diagnostic* and *therapeutic* purposes. More recently, their use as *predictive* instruments has been recognized. The purpose of this report is to demonstrate that the *prognostic* worth of such biochemical measures is enhanced when physiologic criteria are restricted.

*Presented before the Sections on Preventive Medicine and on General Practice at the One Hundred and Fifteenth Annual Convention of the American Medical Association 30 June 1966 in Chicago, Illinois.

**Professor and Chairman, Department of Oral Medicine, University of Alabama Medical Center, Birmingham, Alabama.

***Associate Professor, Department of Oral Medicine, University of Alabama Medical Center, Birmingham, Alabama.

****Junior Lecturer, University of Indonesia School of Dentistry; presently Fellow of the National Heart Institute, Public Health Service.

*****Presently Fellow of the National Heart Institute, Public Health Service.

Method of Investigation

This report consists of three different sets of observations based on a study of 652 subjects. Group I (120 presumably healthy dental patients) were studied by means of the classical three-hour glucose tolerance test.¹ Group II (170 ostensibly well dental patients) were tested with the cortisone glucose tolerance test procedure.² The remaining 362 (Group III) constitute part of the 8,940 participants in the November 1964 Birmingham (Alabama) Diabetes Detection Drive.³ The latter were examined for capillary blood glucose by the Dextrostix method two to four hours after food, drink, or both were consumed. In addition, each of the subjects completed the Cornell Medical Index Health Questionnaire.⁴

Results

The glucose tolerance patterns for the 120 subjects studied by means of the classical glucose tolerance test were arrayed on the basis of the initial (fasting) blood glucose

Table 1
relationship of mean fasting blood glucose to
classical glucose tolerance test pattern

fasting blood glucose group	sample size	mean blood glucose				
		fasting	thirty minutes	one hour	two hours	three hours
50-59	1	58	74	58	55	45
60-69	18	65	101	86	76	63
70-79	44	74	118	106	85	69
80-89	40	82	122	117	102	79
90-99	10	93	130	128	107	85
100+	7	173	227	281	268	232
total	120					

(Table 1). For example, only one subject had an initial blood glucose in the 50 to 59 mg. per cent group; 18 subjects were found to have initial values in the 60 to 69 mg. per cent group. Several points warrant particular attention. Firstly, the higher the fasting blood glucose, the higher are the values for the rest of the tolerance pattern. Secondly, the higher the initial mean value, the less is the decline in blood glucose after 30 minutes. In fact, in the highest blood glucose group (100+ mg. per cent), the decline begins only after one hour. Lastly, and most importantly, one can predict, within limits, from *small* differences at the fasting level the remainder of the glucose tolerance test patterns. Specifically, minor variations under fasting conditions parallel larger delineations at subsequent temporal points (Figure 1).

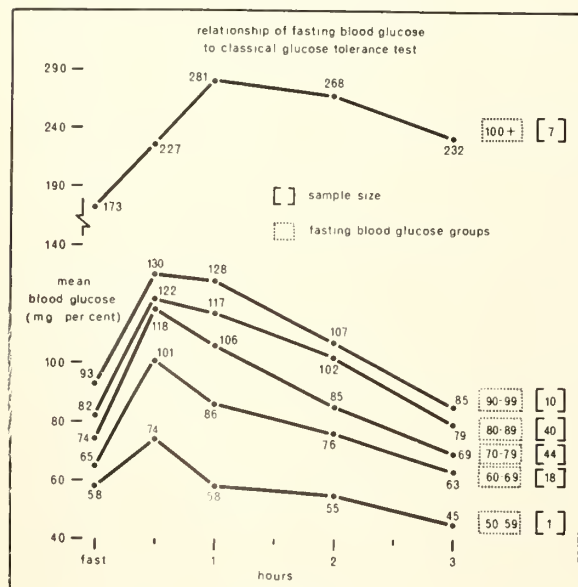


Figure 1

Table 2
relationship of mean fasting blood glucose to
cortisone glucose tolerance test pattern

fasting blood glucose group	sample size	mean blood glucose				
		fasting	thirty minutes	one hour	two hours	three hours
60-69	34	63	114	112	83	66
70-79	38	73	127	128	98	78
80-89	47	83	135	137	103	78
90-99	35	93	156	154	113	86
100+	16	109	171	186	155	121
total	170					

The observations derived from a study of the classical glucose tolerance pattern are underscored by additional studies with the cortisone glucose tolerance test procedure (Table 2). Once again, the glucose tolerance patterns are arrayed on the basis of the initial (fasting) mean score. It is abundantly clear that the rest of the tolerance pattern can be more or less predicted from the basal values (Figure 2).

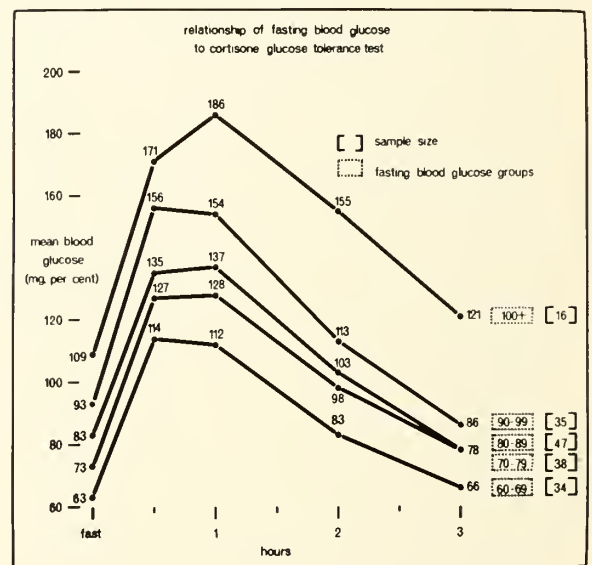


Figure 2

It should be recalled that 362 participants in the Diabetes Detection Drive completed the Cornell Medical Index Health Questionnaire. One of the questions, regarding the presence of a tumor, is to be answered either yes or no. The frequency of positive responses regarding the presence of a tumor in terms of two to four hour capillary blood

sugar is outlined (Figure 3). Of the 38 persons in the youngest age group (0-29 years), none has a tumor in either blood glucose group (60-75 versus 80-95 mg. per cent). In the next shown age category (30-59 years), four per cent of those with the lower blood glucose (60-75 mg. per cent) and eight per cent with the higher blood glucose (80-95 mg. per cent) report the presence of a tumor. In other words, the reported prevalence of

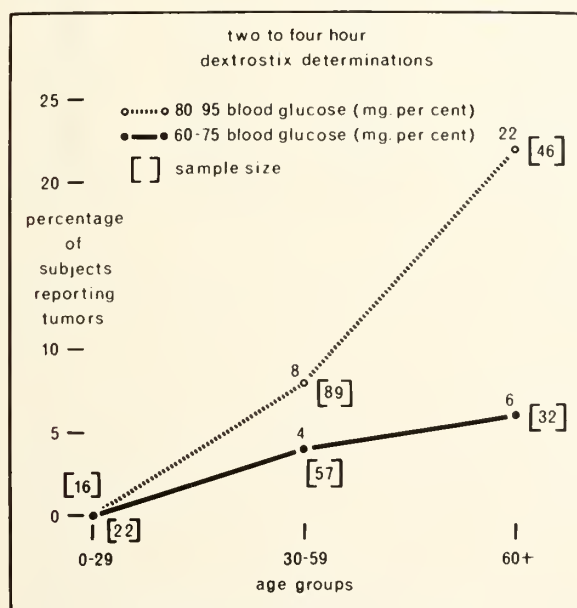


Figure 3

tumors is twofold in the group with the slightly higher blood glucose. Finally, in the oldest group (60+ years), the frequency of reported tumors is six and 22 per cent in the lower and higher blood glucose groups respectively. Thus, tumors are reported three and one-half times more frequently in the group with the slightly higher blood glucose.

Table 3
criteria for glucose tolerance
test patterns

blood glucose determination	glucose tolerance test pattern		
	normal	equivocal	abnormal
one hour	<140	>150	>150
	and	or	and
two hours	<95	>110	>110

Discussion

The important point to be underscored is that small variations in blood glucose provide some measure of predictiveness. In the one case, the prognostic worth relates from one biochemical test (fasting blood glucose) to other biochemical tests (glucose tolerance test). This is supported by other studies⁵ utilizing quite arbitrary criteria (Table 3). For example, the frequency of physiologic, equivocal, and abnormal glucose tolerance patterns based on fasting blood glucose is quite consistent with the observations made in this study (Table 4). It will be noted that,

Table 4
results of 401 glucose tolerance tests in
relation to level of fasting blood glucose

fasting blood glucose, mg. per 100 ml.	number of tests	results of glucose tolerance tests		
		normal	equivocal	abnormal
61 to 70	16	14 (88%)	1 (6%)	1 (6%)
71 to 80	49	31 (63%)	6 (12%)	12 (25%)
81 to 90	152	85 (56%)	21 (14%)	46 (30%)
91 to 100	129	31 (24%)	20 (16%)	78 (60%)
101 to 110	36	3 (8%)	1 (3%)	32 (89%)
111 to 120	16	1 (6%)	1 (6%)	14 (88%)
121 to 130	3	0 (0%)	0 (0%)	3 (100%)

in the individuals with a fasting blood glucose of 61 to 70 mg. per cent, 88 per cent of the individuals have a physiologic glucose tolerance pattern and 6 unequivocally pathologic. As one proceeds along the x-axis (increasing fasting blood glucose), the prevalence of physiologic glucose patterns progressively declines and the incidence of pathologic test patterns successively increases to 100 per cent (Figure 4).

In the second instance, the predictive significance of one biochemical test (postprandial blood glucose) to a clinical condition, an oncologic problem, is demonstrated. Parenthetical mention should be made that relationships between carbohydrate metabolism and carcinomatosis have been described for the past 75 years.⁶⁻¹²

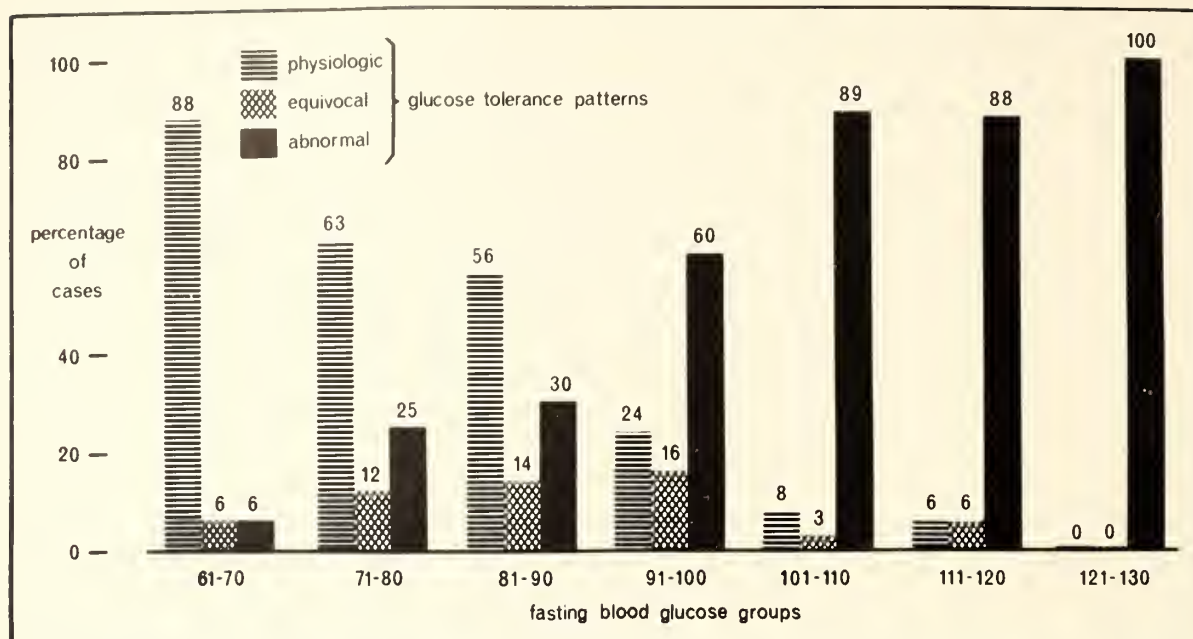


Figure 4

Summary

An attempt has been made to underscore the predictive potential of small differences in carbohydrate metabolism. While the following quote¹³ relates to diabetes mellitus, the philosophy underlines the tenor of this report.

The detection of diabetes can be compared to fishing with a small mesh net that increases the catch of fish but also seines some nonfish or the wrong variety of fish as opposed to using a larger mesh which would be more specific for the size and type of fish sought but bring a smaller yield.

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Cardiac Resuscitation in a Community Hospital

Ralph L. Tieszen, Sr., M. D.

Department of Internal Medicine
Norwood Clinic and Carraway Methodist Hospital
Birmingham, Alabama
Clinical Assistant Professor of Medicine
Medical College of Alabama

Phillip C. Watkins, M. D.

Intern
Carraway Methodist Hospital
Birmingham, Alabama

Robert M. Bryan, M. D.

Department of Internal Medicine
Norwood Clinic and Carraway Methodist Hospital
Birmingham, Alabama

Closed chest cardiac massage has become the standard technique for treatment of cardiac arrest. Cardiac arrest first became a problem of major concern following the introduction of general anesthesia in 1842. The basic steps in treatment have been altered little since the first attempted resuscitation by Niehaus in 1880. Beck in 1947 reported the first successful open chest defibrillation for the human heart by a technique developed by Kouwenhoven in 1933. Schiff in 1874 was the first to perform a thoracotomy to circulate blood by intermittent compression of a dog's chloroform arrested heart. In 1878 Boehm provided circulation with mod-

erate success by intermittent compression of the external thorax of a cat. In 1901 Inglesrud applied Schiff's method of direct cardiac massage through the open chest in the first successful resuscitation of a stilled human heart. In 1947 Gurvich found that a capacitor discharge sent through the chest of a dog would be followed by a resumption of the cardiac function if applied not later than one or one and a half minutes after the onset of induced ventricular fibrillation. However, they thought that this time limit could be extended by rhythmical application of pressure on the thorax in the region of the heart.^{1,3} For the past six years there has been widespread enthusiasm in restoring life to those individuals who have apparently died suddenly and unexpectedly. This has come about because of the following developments: 1) a simple nonsurgical technique for maintaining circulation (closed chest cardiac massage); 2) techniques for artificially as-

The authors wish to express appreciation for the co-operation of Dr. Joseph W. Herod, Jr., of Enterprise, Alabama, who was primarily instrumental in organizing the resuscitation team and the Code 10 routine when he was a General Practice resident at Carraway Methodist Hospital from July 1964 to June 1966.

sisted ventilation; 3) the introduction of external defibrillation for ventricular fibrillation;² and 4) the use of cardiac pacing by artificial pacemakers.

Numerous reports have appeared in the literature from various hospitals on the results of their cardiac resuscitation efforts.³⁻¹⁵ This report deals with analysis of all resuscitation efforts since the "Code 10" cardiac resuscitation team was organized two years ago by the staff of the Norwood Clinic and the house staff of Carraway Methodist Hospital. The hospital had approximately 300 beds when the program was begun two years ago, and now has expanded to approximately 500 beds. It is staffed primarily by a clinic with all major subspecialties. There are five internists who are available through the clinic within seconds, since their offices are located adjacent to the hospital. The hospital also has an active Emergency Room with full complement of interns and residents. Protocols were developed to insure detailed records of all cases for subsequent evaluation.

Methods

The cardiac resuscitation techniques developed by Kouwenhoven, Jude, and Knickerbocker are used.^{1, 17, 18, 19, 20} When the hospital personnel suspects the patient of having cardiac arrest, assisted ventilation with an ambu bag is begun immediately. One of the other hospital personnel available calls the hospital operator who puts the Code 10 on the paging system, and also gives the room number. The house staff, E. R. doctors, and any of the internists who might be in the hospital or in the office immediately next to the hospital go directly to the area where the cardiac arrest has occurred. On the general floor, the nurse from the Intensive Care Unit (ICU) also goes to the area. A nurse anesthetist in the operating room goes directly to the area for intubation. The defibrillating equipment, drug carts, etc., are directly taken to the area of arrest. Resuscitation measures are begun immediately by

whoever arrives first. We have found by experience that generally it takes at least two house staff members and two internists from the hospital staff to conduct the resuscitation measures. In general, the cardiac resuscitation team is able to arrive at the site of the arrest in less than two minutes. Generally, resuscitation efforts have been started within 30 seconds of the arrest by ancillary personnel. In the ICU the nurses do immediate defibrillation with the DC defibrillator if an arrest occurs. Since the ICU has been open, the number of arrests on the general floor have decreased, most of the arrests occurring either in the ER or the ICU. Those patients who do not require ICU care, but are still of high risk type, are generally kept on the lower floors of the hospital so that time-wise, medical help is readily available. The chemotherapy of cardiac arrest is carried out in the usual manner.^{21, 22, 23}

In the evolution of our cardiac resuscitation, a protocol was developed which is now being used in all our cardiac resuscitation patients. This data is recorded in all our charts on all our patients, and made a permanent record on the chart. The cardiac resuscitation is also coded on the discharge records so that these cases are available to us at any time for further study. Figure 1 is the protocol we use for recording cardiac resuscitation data. The hospital staff and the house staff, and paramedical personnel are trained at the beginning of each year, and further training is given throughout the year to maintain a highly efficient team.

Results

1. Age Distribution:

Fifty-six resuscitations were attempted over a two year period. In Table 1. the cases are analyzed as to age and survival. There were two cases under 30. There were no cases of cardiac arrest between the age of 30 and 39. There were five cases between the age of 40 and 49, of which there were two survivors. From the age of 50 to 59 there were 11 cases,

CARDIAC RESUSCITATION IN A COMMUNITY HOSPITAL

IDENTIFICATION

(CIRCLE ANSWER OR FILL BLANK)

1. TEAM CALLED FOR:

A. CARDIAC ARREST

B. RESPIRATORY ARREST

2. BRIEF PATIENT HISTORY:

A. ADMISSION DATE _____

B. DIAGNOSIS _____

C. PERTINENT THERAPY:

DIGITALIS

QUINIDINE

PRONESTYL

VASOPRESSORS

NITROGLYCERIN

ISERITRATE (ETC.)

OTHER

POTASSIUM

D. OTHER SIGNIFICANT HISTORY:

3. A. CONDITION ON DAY OF ARREST

VITAL SIGNS

BP _____ PULSE _____ RESP _____ TEMP _____

B. CONDITION IMMEDIATELY PRIOR TO ARREST (IF KNOWN)

BP _____ COLOR _____ PUPILS _____ TYPE RESPIRATION _____

C. TIME ONSET DISTRESS TO ONSET ARREST _____

D. TIME AIRWAY IN AND AMBU STARTED _____

E. TIME FOR ARRIVAL OF TEAM FROM ONSET ARREST _____

F. HEART RHYTHM FOUND ON SCOPE INITIALLY _____

4. IMMEDIATE MEASURES TAKEN

A. RESPIRATORY

1. MOUTH TO MOUTH

2. AIRWAY AND AMBU

3. INTUBATION
ENDOTRACHEAL

B. CARDIAC

1. CLOSED CHEST MASSAGE

A. HAND

B. CARDIAC MASSAGER
(MECHANICAL DEVICE)

2. OPEN CHEST

C. DRUGS USED

EPINEPHRINE 1:1000

EPINEPHRINE 1:10,000

SODIUM BICARBONATE

IV FLUIDS

CALCIUM LACTATE

POTASSIUM

PRONESTYL

OTHERS

D. NUMBER OF SHOCKS GIVEN AND VOLTAGE USED

D. C. DEFIBRILLATOR OR CARDIOVERTOR

A. C. DEFIBRILLATOR

5. RESULTS

SIGNED _____ M. D.

DATE AND TIME: _____

CARDIAC RESUSCITATION IN A COMMUNITY HOSPITAL

Table 1.
Age Distribution

Age	Cases	Survivors
Under 30	2	1
30 - 39		
40 - 49	5	2
50 - 59	11	3
60 - 69	19	3
70 and over	19	1
	56	10

with three survivors. From age 60 to 69 there were 19 cases, with three survivors. From age 70 and over there were 19 cases, with one survivor.

2. Type or rhythm:

In Table 2. the data is analyzed as to the type of arrhythmia, i.e., ventricular fibrillation, asystole, and miscellaneous, including heart block, respiratory arrest, and those in which the rhythm at the time of arrest was not determined. The data is also arranged as to those patients who were resuscitated from one hour to several days, but later died because of cardiac arrest, and those who sur-

Table 2.

Percentage of Successful Resuscitation In Ventricular Fibrillation, Asystole, and Other Arrhythmias

Arrhythmia	Number	Temporary 1-24 hours		Permanent Successful	
		Number	%	Number	%
Ventricular Fibrillation	21	4	19%	5	24%
Asystole	23	7	30%	3	13%
Other—Heart Block, Respiratory Arrest, Unknown	12	3	25%	2	16%
Total Number of Cases				56	
Total Temporarily and Permanently Restarted				24	
Temporarily Restarted				25%	
Temporarily and Permanently Restarted				45%	
Permanently Restarted				19%	

vived for long periods of time. These patients had return of electrical activity of the heart, with demonstrable cardiac output by recording of blood pressure or pulse. The successful resuscitations are those who left the hospital in all cases but one, who died six weeks later of a metastatic brain tumor, and was considered a successful resuscitation. The patients who were resuscitated for more than one hour, but died within a few days were those who usually died because they were unable to maintain sustained and effective cardiac output, in spite of vigorous supportive medical management. Presumably their hearts were so severely damaged that long term resuscitation was impossible. From Table 2. it will be seen that there were 21 cases of ventricular fibrillation, four of which had temporary resuscitation, 19 per cent, and five permanent resuscitation, 24 per cent. In asystole there were 23 cases, with seven temporary resuscitations, 30 per cent, and three permanent resuscitations, 13 per cent. There were 12 miscellaneous cases which included heart block, respiratory arrest, or unknown arrhythmias, three of which were temporarily resuscitated, 25 per cent, and two permanent resuscitations, 16.5 per cent. Of the total 56 cases, it should be noted that 25 per cent were temporarily restarted, 45 per cent were temporarily and/or permanently restarted, and 19 per cent were permanently restarted, and left the hospital. When one considers the circumstances under which the arrest occurs, the critical illness of the patient at the time of the arrest, and the general metabolic insult to the body associated with arrest, we feel that the per cent of survival is very encouraging, and merits continued efforts at resuscitation. It is doubtful that we can significantly improve our percentage of resuscitations in patients where we were unable to maintain circulation. Their hearts were presumably so severely damaged that recovery was impossible. However, in view of the rapid advancement in extracorporeal circulation, attempts

CARDIAC RESUSCITATION IN A COMMUNITY HOSPITAL

have been made to use heart-lung machines in cardiac arrest, and several successful cases have been reported recently.²⁵

3. Cause of Cardiac Collapse:

In Table 3, the basic disease causing death is reviewed in relation to survival rate. As one would expect, of course, the largest number of patients with cardiac arrest are those with arteriosclerotic heart disease and myocardial infarctions, of which we have 37 cases. Nine patients survived one hour to several days, which is 24 per cent survival. Seven patients survived and actually left the hospital, which is 19 per cent. The rest of the cases have a great variety of diagnoses. There are probably too few cases to draw any valid conclusions from these data. However, I think it should be noted that we had three pulmonary emboli, none of which we were able to resuscitate in any way. We have never successfully resuscitated a pulmonary embolus which required a Code 10 resuscita-

tion. We, of course, have had many pulmonary emboli which have survived; however when the pulmonary embolus is so severe and extensive that it causes immediate cardiac collapse, from the small number of these cases that we had, it appears that survival might be very unlikely.

4. Location of Cardiac Arrest:

Table 4, shows that there were 18 cases of cardiac arrest in the E. R., 50 per cent of which we were unable to resuscitate in any measure. Thirty-eight per cent lived one hour to several days. Twenty-two per cent survived and eventually left the hospital. It is of considerable interest to note that 50 per cent in the E. R. were temporarily or permanently resuscitated. The results in our ICU were rather surprising. There were 14 arrests, of which 70 per cent could not be resuscitated at all. Only 15 per cent survived one hour to several days, and only 15 per cent, or two cases, eventually survived and left the hospital. There are probably several causes to explain this. The patients in the ICU generally are very ill. The sickest patients in the hospital are located in this area. These patients are frequently terminal cardiac patients with intractable heart failure who go into arrest, and cardiac resuscitation attempts are made. Theoretically the patients in the ICU should have the best chances of survival because of the very close supervision, constant cardiac monitoring,

Table 3.
Cause of Cardiac Collapse

Diagnosis at Time of Arrest	No. of Cases	Temporary Survival 1 hr. to sev. days		Permanent Survival	
		No.	%	No.	%
ASHD, Myocardial Infarction	37	9	24%	7	19%
Pulmonary Embolus	3	0	0%	0	0%
Operating Room Anesthesia Arrest	1			1	100%
Respiratory, Emphysema, Pneumonia, etc.	4	1	25%	1	25%
Poisoning	1	0	0%	0	0%
Drowning	1	0	0%	0	0%
Neurologic—Strokes, Hemorrhage, etc., with Cardiac Arrest	4	3	75%	1	25%
Uremia	1	0	0%	0	0%
Miscellaneous	4	1	25%	0	0%
Totals	56	14		10	

Table 4.
Location of Cardiac Arrest

Location	No. Cases	No Survival	Temporary Survival, 1 hr.—days	Survival	Recovery Temp. & Permanent
ER	18	9 - 50%	5 - 38%	4 - 22%	9 - 50%
ICU	14	10 - 70%	2 - 15%	2 - 15%	4 - 28%
General Med.	22	13 - 59%	7 - 32%	2 - 9%	9 - 41%
OR	2			2 - 100%	2 - 100%
Totals:	56	32 - 57%	14 - 25%	10 - 18%	24 - 42%

highly trained and skilled personnel available for immediate defibrillation, in addition to which physicians are in the immediate area and available within 30 seconds at all times, 24 hours a day. We feel that our results in the general medical floors are surprisingly good. These patients, of course, are frequently in rather inaccessible areas, and it takes us longer to get to these areas. In general we have been able, as noted before, to reach these areas in less than two minutes, and resuscitation is generally under way by paramedical personnel within less than 60

seconds. Fifty-nine per cent of these cases were not resuscitated. Thirty-two per cent lived for one hour to several days, and nine per cent survived. A total of 41 per cent either survived temporarily or were fully recovered. The number of arrests in the OR are too small to come to any definite conclusions. We have only had two arrests in the OR, one during anesthesia induction, and another a case of ventricular fibrillation during cardiac catheterization for placement of a pacemaker in a patient with heart block. Both of these patients were immediately re-

Table 5.

Complications Found at Autopsy

Clinical Diagnosis	Autopsy Findings	Code 10 Complications
1. Friedreich's ataxia.	Pulmonary emboli.	None.
2. Diabetes mellitus. MI.	Acute anterior MI. Meningioma (inc.)	None.
3. MI.	Old and recent MI. Bilateral hydrothorax. Fractured ribs 3, 4, and 5 left.	Fractured ribs.
4. Drowning.	Intravascular massive hemolysis. Pulmonary edema. Left pneumothorax. CNS edema.	Left pneumothorax? due either to resuscitation or tracheotomy.
5. CHF. Diabetes. ASHD.	Mitral and aortic stenosis. Cardiac hypertrophy. Pulmonary edema. Pericardial effusion.	None.
6. Pulmonary emboli. CA lung?	Pulmonary emboli and pulmonary infarction.	None.
7. MI.	Old and recent MI.	None.
8. DT's? Drug reaction due to Vistaril?	Fatty liver. Lobar pneumonia.	None.
9. Cerebral hemorrhage	Cerebral infarction. Portal cirrhosis. Esophageal varices.	None.
10. Acute MI.	Old and recent MI. Pulmonary edema. Left encephalomalacia.	None.
11. Cirrhosis.	Portal cirrhosis. Post-op cholecystectomy and duodenostomy.	None.
12. Acute anterior MI.	Acute anterior MI. Pulmonary edema.	None.
13. CA liver?	Metastatic CA to brain from thyroid. Cerebroencephalomalacia.	None.
14. Acute MI.	Old and recent MI. Left ventricular aneurysm. Pulmonary edema. Pericarditis. Encephalomalacia.	Fractured ribs.

Abbreviations:

ASHD—Arteriosclerotic heart disease.

CA—Carcinoma.

CHF—Congestive heart failure.

CNS—Central nervous system.

DT's—Delirium tremens.

MI—Myocardial infarction.

suscitated, and are alive, and left the hospital with full recovery.

5. Complications Found at Autopsy:

Table 5. is an analysis of autopsy findings on the unsuccessful Code 10 resuscitations. Fourteen patients in this group had autopsies. The rather small per cent of autopsies is in part due to the fact that autopsies were not done in patients who died in the E. R. unless they are requested by the coroner. Various complications have been mentioned in the literature associated with cardiac resuscitation.²³ These are rupture of the heart, fractured ribs, pneumothorax, lacerations of the liver, rupture of the aorta, lacerations of the spleen, multiple bone marrow emboli, cardiac contusion, and others.^{24, 25} Of the 14 autopsies that were done, three cases revealed complications. We had two cases of fractured ribs, one of which had a pneumothorax. This patient's pneumothorax could have been due either to resuscitation or to tracheotomy. Other than this, we had no complications in any of our Code 10 resuscitations.

6. Post-Resuscitation Complications:

Much concern has been expressed about post-resuscitation complications such as long term survival with no cerebral function. We had one patient with decerebrate rigidity for 24 hours, followed by severe agitated disorientation for three days, following which he went into delirium tremens for a week, with eventual total recovery. A second patient had mental confusion for several weeks, with total recovery. All our patients have

had sore chests, pleurisy, and pain for several weeks to three months. We have not had any patients who lived for any length of time with severe neurologic damage. One patient who was decerebrate had obvious severe damage, and lived for six days, and died. Long term survival without cerebral function has not been a problem.

Conclusions

The American Heart Association has said, "External cardiac resuscitation is a proved and accepted life-saving technique, and should be applied as an emergency procedure by properly trained individuals of the medical, dental, nursing and allied health professions, and of rescue squads; the undersigned urge that training procedures for respiratory and closed-chest cardiac resuscitation be widely disseminated to these groups."²⁸ The experience in our hospital so far indicates that 57 per cent of our attempted resuscitations were unsuccessful. Twenty-five per cent were successful, in that they lived for one hour to several days. Nineteen per cent survived. This experience leads us to believe that cardiac resuscitation is of vital importance to every hospital. When one considers the difficult circumstances one has to deal with in attempting cardiac resuscitation, the frequent severe cardiac damage, or other medical complications, these results are indeed quite gratifying. We believe that an effective, highly trained cardiac resuscitation team should be an integral part of every hospital.

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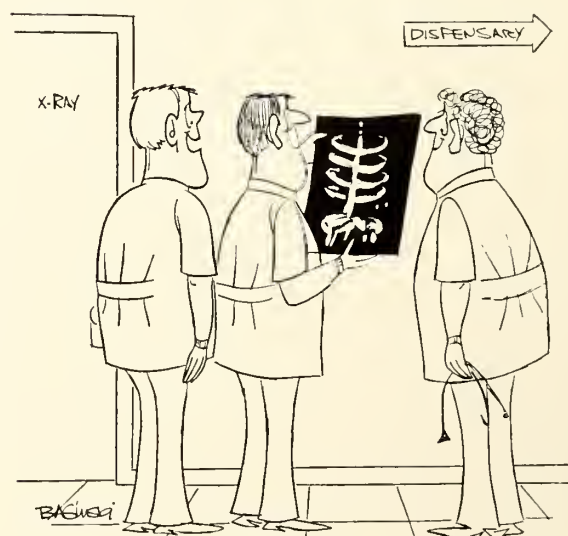
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Table 6.

Post Resuscitation Complications—10 Patients

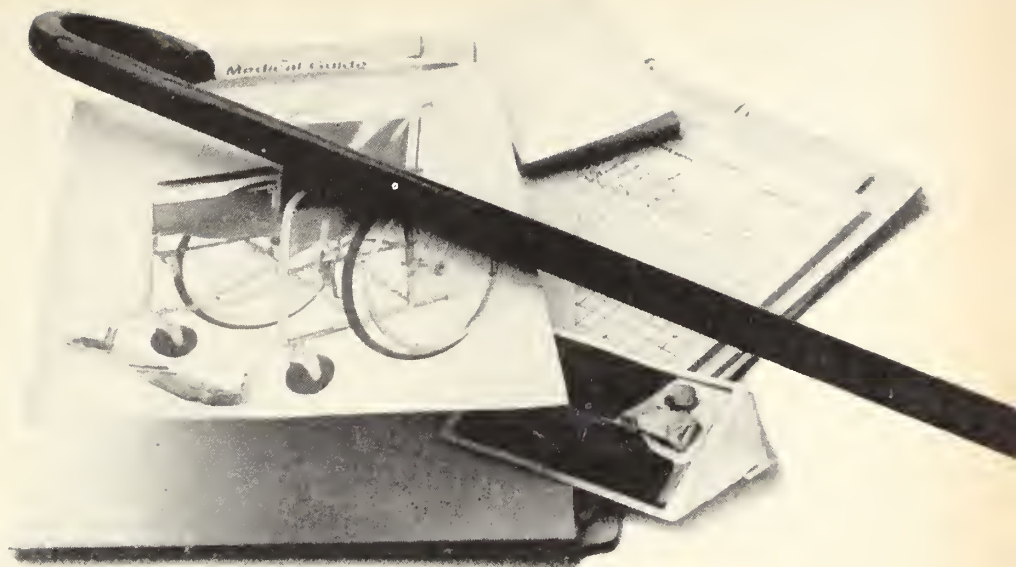
1. Decerebrate rigidity 24 hours, agitated disorientation three days, followed by DT's one week, with essentially full recovery.
2. Mental confusion several weeks—total recovery.
3. All had sore chests, pleurisy—two weeks to three months.

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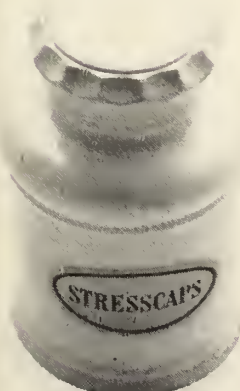

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Vitamin B ₂ (Riboflavin)	10 mg															
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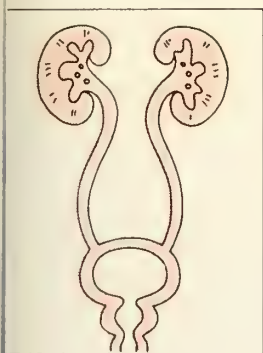
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Gantanol (sulfamethoxazole) offers a comprehensive spectrum of antibacterial effectiveness against most common gram-negative as well as gram-positive invaders. In addition, it provides satisfactory concentrations in the blood and urine with ready diffusion

into interstitial fluids for antibacterial activity at foci of bacterial invasion.

High antibacterial activity against *E. coli* and other common urinary pathogens... A review of 153 cases of acute G.U. infections reported in the literature shows

that 90% responded to Gantanol (sulfamethoxazole), with over one-half of these patients showing excellent relief of symptoms.^{1,2} Even in stubborn chronic G.U. infections, almost 60% of 450 patients improved on Gantanol (sulfamethoxazole), including many who had not responded to other antibacterials.¹⁻⁶

Generally uncomplicated therapy enhances the favorable clinical results... Of the total 686 patients from the studies cited,¹⁻⁶ only three discontinued therapy because of side effects. Most of the side effects reported (approximately 3%) were mild and included nausea and/or vomiting, skin rash, dizziness, headache, gastritis, generalized uneasiness and itching.¹⁻⁶

1. Peters, J. H.: *J. Urol.*, 87:747, 1962. 2. Draper, J. W., et al.: *South. M. J.*, 57:920, 1964. 3. Stewart, B. L.: *J. Urol.*, 87:491, 1962. 4. Hagstrom, R. S.: *Rocky Mountain M. J.*, 59:(2), 37, 1962. 5. Arnold, J. H.: *Clin. Med.*, 71:552, 1964. 6. Nelson, C. G.: *Colorado GP*, 3:(3), 2, 1961.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first three months of life.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions, including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus or rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-John-

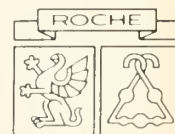
son syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

Dosage: Adults—4 tablets initially, then 2 tablets b.i.d. or t.i.d. depending upon severity of infection. Children—1 tablet/20 lbs initially, followed by ½ tablet/20 lbs b.i.d.

How Supplied: Tablets, 0.5 Gm, bottles of 50.

Roche Laboratories

Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



when there are bacterial invaders in the bladder, prostate or kidneys

Gantanol[®]
(sulfamethoxazole)



Periurethral glands



Bartholin's gland



Cervical glands

Flagyl[®].....

brand of

metronidazole



Seminal vesicles



Prostate gland



Bladder

Destroys Trichomonads Wherever They Are

Flagyl seeks out the sites where trichomonads hide. Only a systemic agent can. Flagyl does, selectively and effectively.

Flagyl destroys trichomonads in the inner crypts, glands and cavities of the genitourinary tract in both women and men. Consequently, Flagyl is capable not only of curing trichomoniasis in women but also of preventing reinfection.

Correctly used, with due attention to repeat courses of treatment for resistant, deep-seated invasion and to the presumption of reinfection from male consorts, Flagyl has repeatedly produced up to 100 per cent cure in large series of patients.

When the diagnosis of trichomoniasis is positive, Flagyl is positive.

Dosage and Administration—In women: one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

In men in whom trichomonads have been demonstrated: one 250-mg. oral tablet twice daily for ten days.

Contraindications—Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution—Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side Effects—Infrequent and minor side effects include nausea, metallic taste, furry tongue and headache. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness of an extremity, joint pains, confusion, irritability, weakness, flushing, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

Did Dorothy Larson show you her ankles in private? Now she shows them in public.

Your office examination would have confirmed that Mrs. Larson was up to her knees in edema. Her heart was beginning to fail. And her ankles had disappeared under an inch of salty water.

Along with digitalis, you might have prescribed Hygroton. To get rid of the edema. And to keep it from coming back. And you prescribe Hygroton the same way you usually prescribe digitalis: just once a day.

Tablet for tablet, Hygroton is just about the most effective diuretic going. And it costs a fraction of what Mrs. Larson would have to spend for equivalent therapy with short-acting diuretics.

In fact, Hygroton is an awfully nice way to treat the Mrs. Larsons in your practice. Just tell them you can get their ankles back at half price.

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihyper-

tensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease.





Hygroton[®]

chlorthalidone

and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.
Side Effects: Dizziness, weakness, nausea, vomiting, hypoglycemia, hyperuricemia, headache, muscle cramps,

postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration.

Average Dosage: One tablet (100 mg) with breakfast daily or every other day.

Availability: Tablets of 100 mg

6524-V(B)

For full details, see prescribing information.

...so you might say Hygroton is good public relations for Mrs. Larson

Because it gets her *out* in public in the first place. At 43, Mrs. Larson worries about appearances and swollen ankles don't help.

But Hygroton's cosmetic effect is only half the story. Hygroton and digitalis therapy helps her get back in the swing of things. Gives her a second wind. Gets rid of the extra pillow she needed for a good night's sleep. Now she even likes to take walks. Just for the fun of it!

When her troubles began, Mrs. Larson thought they were the signs of the change of life. It's a change all right, but one you can treat. And you can count on Hygroton to help keep her in public instead of in the hospital.

See preceding pages for brief summary of prescribing information.

Geigy



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York



Epidemic of Tinea Capitis In Elementary School

W. S. Pennington, M. D.

Athens, Ala.

As Chairman of our County Board of Health, recently I was notified that one of our local grammar schools was suffering from a rampant epidemic of fungus infection of the scalp. Having no money available in the County Health Department and no regular full time health officer, I volunteered to undertake this problem myself. I consulted with the Board of Education and obtained their agreement to finance the project up to two hundred dollars.

I made arrangements with the school principal, took my nurse and Wood's light. In one hour and seven minutes we ran these children across a darkened stage of the auditorium and completed examination of 460 children. We found 38 positive cases of Tinea Capitis. Most of these were in the first grade. In my office several days later we examined eight who had been absent on the first day.

We then gave each of these infected children six tablets of 250 mg. Griseofulvin (micro-size). They were instructed to take all six tablets in one day.

The scientific material contributed by Dr. W. S. Pennington illustrates the effectiveness of the individual practicing physician in serving his community. It also demonstrates that research is by no means confined to the so-called Ivory Tower and that large grants of money are not always needed for progress in medicine to be made.

Dr. Pennington is to be congratulated, it is hoped that many similar incidences will not only occur, but will be reported.

Ed.

Six weeks later we returned to the school and re-examined the 38 positive cases. We found five cases still positive and retreated them in the same manner.

Six weeks later we re-examined these five positive cases and found them all cured.

Here I am presenting a convenient and relatively cheap method of treating an epidemic of Tinea Capitis.

R. Buckminster Fuller To Address AMA Meeting

R. Buckminster Fuller, the noted designer-engineer-scientist-philosopher, will be the keynote speaker at the American Medical Association's National Congress on Environmental Health Management April 24-26 in New York City.

Mr. Fuller will open the three-day discussion of air and water pollution problems by asking the Congress, "What Quality of Environment Do We Want?" He will speak at 9:15 a. m. Monday, April 24, in the Georgian Ballroom of the Americana Hotel.

New York Gov. Nelson Rockefeller also will address the Congress at 12:45 p. m. Monday, April 24, at a luncheon in the Georgian Ballroom. Governor Rockefeller will discuss the roles of state and local government in improving environmental conditions.

In his keynote address, Mr. Fuller will consider some factors of fundamental human behavior which present both problems and opportunities in "managing" our environment more efficiently.

The speech will be Mr. Fuller's first formal contact with the medical profession. Noted

(Continued on Page 1360)

The Mediatrix Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.

"A steroid-nutritional compound (Mediatrix) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. 8:518 (Mar.) 1961.

"Mediatrix (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics 12:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

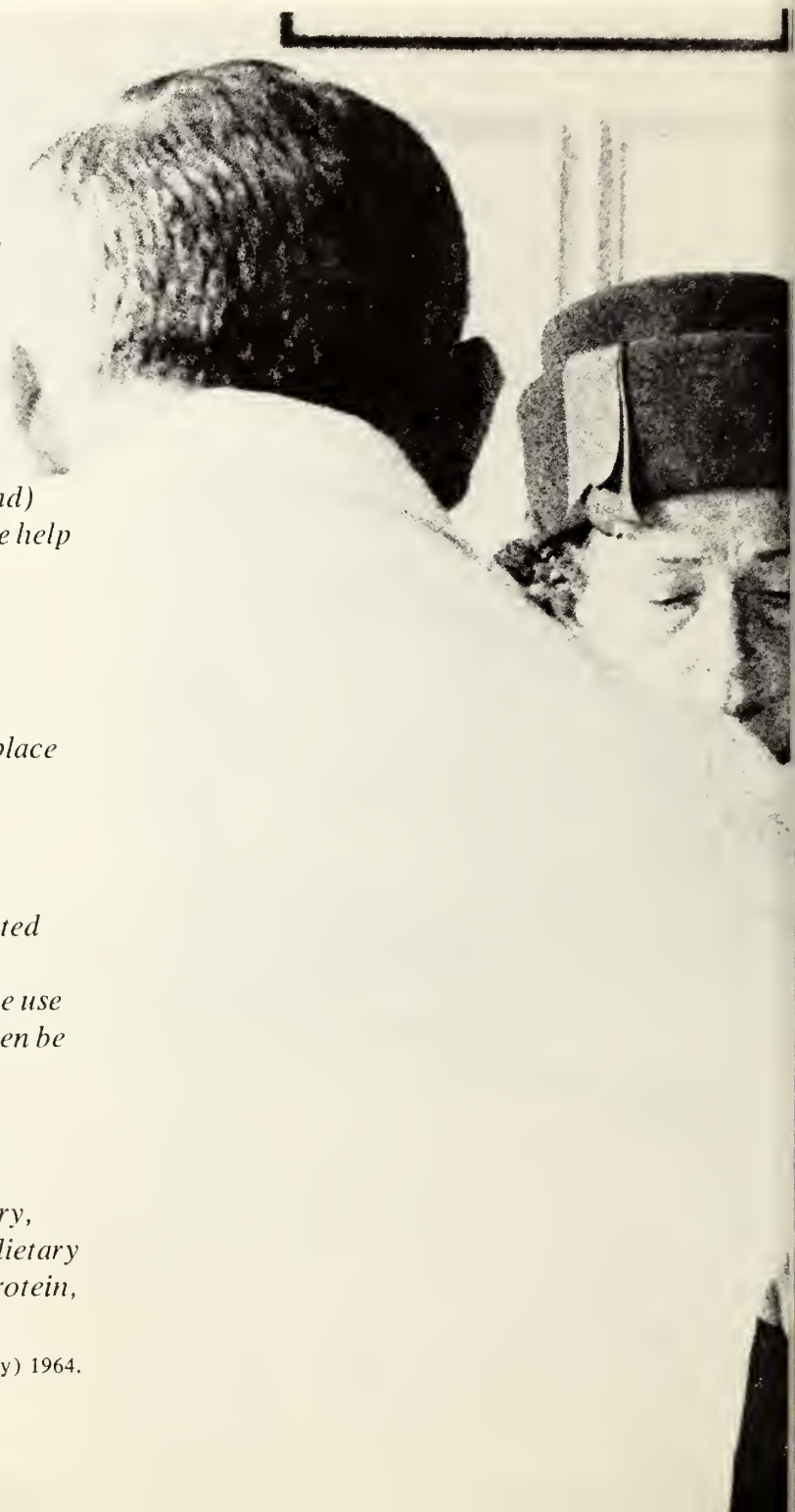
Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. 12:489 (May) 1964.



Mediatric®

Designed for the “metabolically spent”

Nutritional reinforcement for those who can't
—or won't—eat properly...balanced amounts of
estrogen and androgen to counteract declining
gonadal hormone secretion and its sequelae of
premature degenerative changes...mild
antidepressant for a gentle “mood” uplift...

The estrogen component in MEDIATRIC is **PREMARIN®** (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation*. It contributes a gentle “mood” uplift through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.
Contains 15% alcohol	

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 — MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 — MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 — MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.

Mediatric®
steroid-nutritional compound



AYERST LABORATORIES, NEW YORK, N. Y. 10017 • Montreal, Canada



AMA MEETING

(Continued from Page 1357)

for his original concepts of functional design (the geodesic dome, the Dymaxion system of homes, autos, machines, etc.), Mr. Fuller has long held that the world's primary resource is energy, but that this resource is poorly understood and poorly used in many instances. This is partly because of basic characteristics of human nature; understanding these characteristics and comprehending the vast changes being made in our surroundings may be the first step in "reforming" the environment, he says.

The National Congress on Environmental Health Management will be an assembly of major scientific and health authorities who are concerned with the management of air, water, and other environmental resources.

The three-day meeting will consider ways to use the advanced technology available for cleaning up air and water and preserving them for continued use. A main theme will be the need for coordinating professional,

administrative, and technological resources in this effort.

The Congress is the fourth annual AMA-sponsored meeting concerned with environmental health. It is sponsored by the AMA's Council on Environmental and Public Health, the Department of Environmental Health, and Division of Socio-Economic Activities.

Cooperating in the meeting are the Medical Society of the State of New York, the New York State Action for Clean Air Committee, and the New York State Health Department.

The spring meeting of the New York State Action for Clean Air Committee will be held in conjunction with the Congress at 3:30 p. m. Sunday, April 23, in the Biarritz Suite of the Americana Hotel.

Editor's Note: A press room will be open throughout the meeting in the Americana Hotel. Contacts: Frank Chappell or Larry Boston, Science News Department, AMA, 535 N. Dearborn St., Chicago, Illinois 60610. Telephone: Code 312 527-1500 ext. 240 or 243.



for psychiatric treatment

Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals □ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients

and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction □ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy □ *We will be pleased to provide further information upon request.*

ACCREDITED BY THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

peachtree hospital

41 PEACHTREE PLACE, N. E. / TELEPHONE 873-5681 / ATLANTA 9, GEORGIA



Alabama Department of Public Health



Pollution Of A Vital Resource

By Catherine G. Lamar,

Information Specialist

Alabama's waterways have seen an astounding increase of pleasure water craft in the past ten years.

This is indicative of many good developments: of the rise in prosperity; of the greater availability of leisure time for recreational pursuits; of the growing numbers turning to water-based sports for relaxation and enjoyment. It is also indicative, however, of increased contamination of one of man's most vital natural resources—water.

Figures released by the Alabama Department of Conservation show that during 1966, 12,000 Class II water craft (16 feet-26 feet) were registered. About 50 per cent of these had toilet facilities. One thousand Class III (26 feet-40 feet) and 71 Class IV (40 feet and over) water craft were registered with each reporting 100 per cent toilet facilities. This makes a total of 7,100 toilets emptying waste products into Alabama waters.

It has become increasingly important, not only in Alabama but throughout the nation, that effective programs of enforcement and adequate devices for treatment of waste products be developed in this area. Such programs and measures should either effectively eliminate the discharge of waste products from boats or adequately treat the waste so as to render it acceptable for discharge into surrounding waters. Many of the problems encountered in Alabama have been national

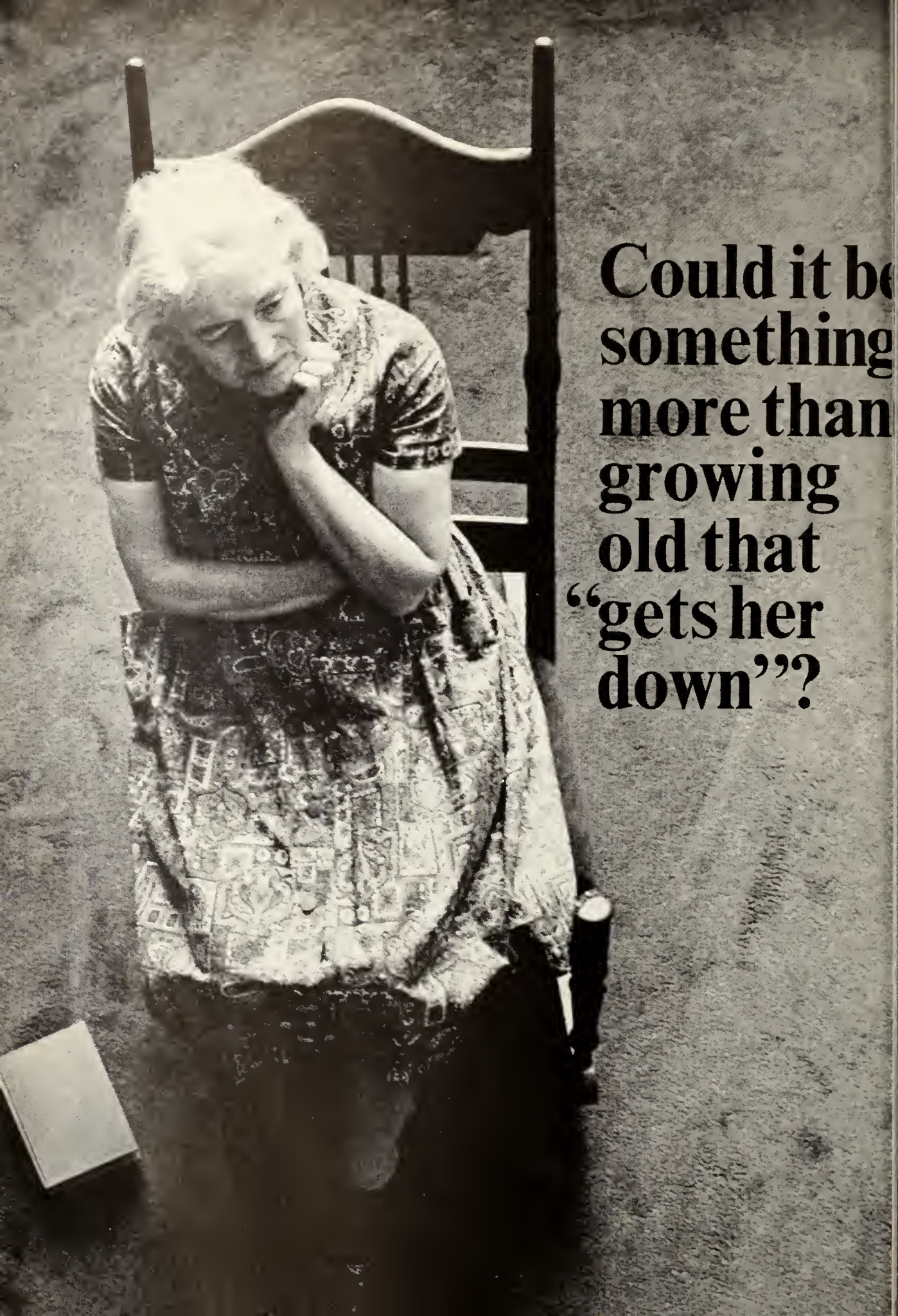
problems as well: inadequate legislation and no acceptable standards for treatment facilities.

Laws cannot be enforced until they are enacted. Most reports conclude that responsibility for the development of performance standards for water craft waste disposal devices and the testing and certification of such devices in regard to matters of health and water quality must be vested in an organization which is public health oriented.

The first regulatory act of this kind in Alabama was introduced during a 1965 special legislative session. This bill would have given the Alabama Department of Public Health the authority to regulate and control waste facilities on pleasure water craft. The bill was defeated.

Operating on the premise that water pollution constitutes a public health problem, a similar bill is being drafted by the Alabama Department of Public Health and will be introduced during the 1967 legislative session. This bill would provide the legal framework for the prompt enunciation of public policy in regard to water quality standards or criteria which will govern the use of boats on various bodies of water, the disposal of wastes from boats on such bodies of water, and the performance of devices provided for the holding or treatment and disposal of

(Continued on Page 1364)



**Could it be
something
more than
growing
old that
“gets her
down”?**

Mild mood depression, poor appetite, little interest in the present or future. Does this picture mean that she's giving in to functional fatigue?

When functional fatigue is part of her problem, Alertonic can help counteract accompanying apathy and inertia. It helps lift mood, stimulate appetite, and establish new interest in daily life.

Pleasant-tasting Alertonic combines pipradrol hydrochloride—a gentle cerebral stimulant—with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals ...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Available only on prescription
Alertonic[®]

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

7-0378

POLLUTION OF A VITAL RESOURCE

(Continued from Page 1361)

wastes under specified circumstances. It would also provide the mechanism to bring together people of all concerned disciplines to clearly define problems and to seek mutually agreeable solutions.

Many states have already passed and are enforcing such laws and regulations. More and more states are becoming alarmed at the pollution of waters . . . alarmed by the health hazard . . . alarmed at the spoilage of natural resources. Yet here in Alabama,

where a temperate climate coupled with an abundance of waterways provides more opportunities for water-based sports, we lack necessary protection.

The Alabama Department of Public Health is actively involved in this quest to find a means of assuring citizens of Alabama the continuance of healthy recreational opportunities on Alabama's waterways and solicits the assistance of all who are interested in the early enactment of adequate controls as a cooperative effort. Since health is our goal, we must continue to make health our business.

Conference On Emergency Medical Services

Leon C. Hamrick, M. D.

This meeting, held in Chicago, April 6-7, was attended by 150 participants from over the United States. Most were physicians from all types of practices and interest. Some were from allied fields such as The Association of Blood Banks, Ambulance Association of America, American Red Cross, etc.

The primary reason for the meeting was two fold—to point up the need for improvement in emergency medical service and through workshops, to explore the problem and come up with workable recommendations.

The importance of the problem is emphasized by the number of accidents both fatal and disabling which occur. In 1965, in the United States, 52,000,000 injuries occurred; 105,000 were fatal and a much greater number were disabling. It has been estimated that an additional 20 per cent (20,000) accident victims might be saved and 25,000 fewer permanent disabling injuries prevented if adequate first aid knowledge was possessed and put into practice by ambulance attendants, rescue workers, etc. As a matter of local interest, Alabama had 2,397 fatal accidents in 1965.

The accident victim, however, only makes up a fraction of those patients for whom emergency medical service is needed. A growing number of patients continue to present themselves to emergency clinics and departments each year. At the present trend, by 1972, there will be eight emergency clinic visits for each hospital admission. This figure is staggering and the problem grows in complexity.

The importance is again emphasized by the shortcomings of organized medicine and our society as a whole in the four major fields covered by the various workshops at the meeting. These were:

1. First aid and rescue.
2. Transportation of the ill and injured.
3. Emergency communications.
4. Emergency facilities—staffing and patient management.

Eight workshops consisting of fifteen participants each met in two three hour sessions working on the above problems. Recommendations from each group were submitted to the AMA Committee on Emergency Medical Services. From this committee, in about six weeks, will be issued a report incorporating these recommendations. Following receipt of this information, a report to the State Medical Association will be made.

The Author attended this meeting as a representative of the Medical Association of the State of Alabama.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph.D., Director

MARCH 1967

Examination for Intestinal Parasites	1,908
Examination for Malaria	261
Salmonella & Shigella	
(blood-feces-urine-food)	46
Examination for tubercle bacilli	4,626
Examination for gonococci	2,334
Serological test for syphilis	30,581
FTA	67
Darkfield	5
Brucella	0
General Bacteriology (cultures for isolation and confirmation)	75
Staphylococcus (cultures for isolation and confirmation)	216
Examinations for diphtheria	6
Streptococci examinations	2,385
Mycology	33
Agglutinations	16
Vincent's infection	4
Complement fixation tests	161
Test for Phenylketonuria (PKU)	6,423
Cytology	960
Water examinations	3,291
Milk and dairy products examinations	4,869
Sea food examinations	142
Examination for Negri bodies (smears & animal inoculation)	401
Virology	8
Rh Factor bloods	696
Miscellaneous	703

TOTAL 60,217

BUREAU OF PREVENTABLE DISEASES

W. H. Y. Smith, M. D., Director

Current Morbidity Statistics

1967

E. E.

	Feb.	March	March
Tuberculosis	143	140	113
Syphilis	128	125	132
Gonorrhea	253	467	301
Chaneroid	0	1	2
Typhoid fever	1	0	0
Undulant fever	0	0	0
Amebic dysentery	2	0	5
Searlet fever & strep. throat	483	445	271
Diphtheria	0	0	2
Whooping cough	2	2	12
Meningitis	12	10	7
Tularemia	0	0	0
Tetanus	3	0	1
Poliomyelitis	0	0	0
Encephalitis	0	0	0
Smallpox	0	0	0
Measles	219	314	441
Chickenpox	48	49	193
Mumps	118	97	53
Infectious hepatitis	32	23	44
Typhus fever	0	0	0
Malaria	7	2	0
Cancer	403	669	599
Pellagra	0	0	0
Rheumatic fever	21	10	19
Rheumatic heart	17	13	23
Influenza	139	1,638	4,313
Pneumonia	307	340	428
Rabies—Human cases	0	0	0
Pos. animal heads	3	14	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.

BUREAU OF VITAL STATISTICS

PROVISIONAL BIRTH AND DEATH

STATISTICS AND COMPARATIVE DATA

1966

Ralph W. Roberts, M. S., Director

Live Births	Number Recorded			Rate*		
	1966	1965	1960-1964	1966	1965	1960-1964
Deaths	Prov.	Final	Average	Prov.	Final	Avg.
Causes of Death						
Live Births	65,707	70,101	77,986	18.7	20.1	23.2
Deaths	32,556	32,354	30,727	9.2	9.3	9.2
Fetal Deaths	1,342	1,455	1,638	20.0	20.3	20.6
Infant Deaths						
under one month	1,269	1,386	1,625	19.3	19.8	20.8
under one year	1,905	2,141	2,453	29.0	30.5	31.4
Maternal Deaths	38	35	57	5.7	4.9	4.2
Causes of Death						
Tuberculosis, 001-019	252	255	274	7.2	7.3	8.2
Syphilis, 020-029	30	30	48	0.8	0.9	1.4
Dysentery, 045-048	7	5	11	0.2	0.1	0.3
Diphtheria, 055	1	5	3	0.1	0.1	0.1
Whooping cough, 056		4	6		0.1	0.2
Meningococcal infections, 057	17	21	18	0.5	0.6	0.5
Poliomyelitis, 080, 081	2	3	4	0.1	0.1	0.1
Measles, 085	3	12	10	0.1	0.3	0.3
Malignant neoplasms, 140-205	4,392	4,250	3,995	124.7	122.1	119.0
Diabetes mellitus, 260	591	556	452	16.8	16.0	13.5
Pellagra, 281	1	2	4	0.1	0.1	0.1
Vascular lesions of central nervous system, 330-334	4,478	4,525	4,284	127.2	130.0	127.6
Rheumatic fever, 400-402	13	17	23	0.4	0.5	0.7
Diseases of the heart, 410-443	11,023	10,533	10,239	313.0	302.6	305.0
Hypertension with heart disease, 440-443	1,420	1,373	1,649	40.3	39.4	49.1
Diseases of the arteries, 450-456	791	813	700	22.5	23.4	20.9
Influenza, 480-483	69	90	187	2.0	2.6	5.6
Pneumonia, all forms, 490-493	911	1,026	935	25.9	29.5	27.8
Bronchitis, 500-502	90	74	64	2.6	2.1	1.9
Appendicitis, 550-553	47	16	35	1.3	0.5	1.0
Intestinal obstruction and hernia, 560, 561, 570	144	160	154	4.1	4.6	4.6
Gastro-enteritis and colitis, under 2, 571.0, 764	90	94	132	2.6	2.7	3.9
Cirrhosis of liver, 581	235	227	201	6.7	6.5	6.0
Diseases of pregnancy and childbirth, 640-689	38	35	57	5.7	4.9	7.2
Congenital malformations, 750-759	336	351	391	5.1	5.0	5.0
Immaturity at birth, 774-776	394	417	519	6.0	5.9	6.7
Accident total, 800-962	2,397	2,419	2,111	68.1	69.5	62.9
Motor vehicle accidents, 810-835, 960	1,193	1,272	992	33.9	36.5	29.6
All other defined causes	4,572	4,271	4,469	129.8	122.7	133.1
Ill-defined and unknown causes, 780-793, 795	1,632	1,737	1,401	46.3	49.9	41.7

*Rates: Birth and death—per 1,000 population

Infant deaths—per 1,000 live births

Fetal deaths—per 1,000 deliveries

Maternal deaths—per 10,000 deliveries

Deaths from specified causes—per 100,000 population

**Less than rate of 0.05



when he just can't sleep
Tuinal[®]

**One-Half Sodium Amobarbital and
One-Half Sodium Secobarbital
supplied in $\frac{3}{4}$, $1\frac{1}{2}$, and 3-grain Pulvules[®]**



Tuinal helps wakeful patients fall asleep fast, stay asleep all night.

Indications: Tuinal, comprised of equal parts of Seconal® Sodium (sodium secobarbital, Lilly) and Amytal® Sodium (sodium amobarbital, Lilly), is indicated for prompt and moderately long-acting hypnosis. Not suitable for continuous daytime sedation.

Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in pa-

tients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Additional information available to physicians upon request.

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Lilly

Sneaky Spider's Bite Is Serious

More Americans are having unpleasant experiences with the "Brown Recluse," a sneaky spider with a bite probably more toxic than that of the Black Widow.

Now seen in a dozen midwestern and southern states, the shy brown spider (*Loxosceles reclusa*) seems to be expanding its territory. Tourists probably will contribute to its spread this summer when they carry it home in their personal belongings.

The Brown Recluse tries to stay away from humans, but it hides in places where it can hardly avoid them—shoes, blankets, rolled-up newspapers, the dark corners of man-made structures, etc.

The result often is a bite that the person isn't aware he's getting, but which becomes painful and swollen later. A few deaths have been attributed to brown spider bites.

The brown spider's venom now is being studied for possible medical uses, reports the Medical News section of the April Journal of the American Medical Association.

Investigators at Little Rock (Ark.) Veterans Administration Hospital and the University of Arkansas Medical Center have developed techniques for "milking" the spiders of their venom by giving them mild electric shocks.

"Our data indicate a biological poison much more potent than known snake venoms, and probably more toxic than venom from the Black Widow spider," said Paul N. Morgan, Ph. D., a research microbiologist at Little Rock VA Hospital.

The Brown Recluse is being seen in an increasing number of states, say the Arkansas investigators, and physicians should consider its bite as a cause when examining certain types of lesions. The spider has been reported in southern Colorado, Kansas, Missouri, southern Illinois, North and South

Carolina, Georgia, Alabama, Mississippi, Arkansas, Louisiana, Texas, and Oklahoma.

It was only ten years ago that University of Missouri investigators discovered the poisonous qualities of the Brown Recluse. Until then, the Black Widow (*Latrodectus mactans*) was believed to be the only North American spider capable of inflicting serious injury on man.

So little is known about spider venom that it's impossible to estimate what might constitute a regularly fatal dose, Dr. Morgan said. It is known that the female brown spider ejects approximately twice as much venom as the male. (Only the female Black Widow is venomous.)

When a brown spider bites, there may be a mild sting, but in many instances, the victim doesn't know he has been bitten. Pain may be noted in two to eight hours, often followed by swelling, blistering, or even hemorrhage and ulceration. The swelling tends to spread downward.

Some investigators have recommended prompt administration of large doses of corticosteroid drugs, followed by injections every other day for two or three more injections. Hospitalization is required for severe cases of spider poisoning.

Exactly how the venom acts remains to be determined, Dr. Morgan said. Experiments with rabbits indicate that death is caused by hemorrhaging and collapse of blood vessels.

Preliminary studies indicate that the venom can be chemically separated into toxic and nontoxic components. It may be possible to use the nontoxic fractions as a poison antidote, Dr. Morgan said.

In addition to his work at the VA Hospital, Dr. Morgan is assistant professor of microbiology and medicine at the University of Arkansas School of Medicine.



"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"

The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis



Emit Luther McCafferty, Jr., President-Elect of MASA

Elected without opposition to the office of President-Elect of the Medical Association of the State of Alabama at the 106th Annual Session April 20-22 was Emit Luther McCafferty, Jr., Mobile surgeon, who has played an active role for a number of years as member and three-times Chairman of the Committee on Legislation.

The son of a physician who served his entire medical career within the network of the Alabama insane hospitals system, Dr. McCafferty entered practice at Mobile in 1948 after receiving his M. D. Degree from Tulane and Naval service during World War II.

His father, the late Emit Luther McCafferty, Sr., was superintendent of Searcy Hospital for the Insane at Mount Vernon when his only son was born in 1914. He also was assistant superintendent of Alabama Insane Hospitals. The senior McCafferty died in January, 1946.

The junior McCafferty, known throughout the State as "June," attended private schools in Mobile, 30 miles south of Mount Vernon, and was graduated from University Military School in 1932. He received his A. B. degree from the University of Alabama in 1936 and enrolled in the medical school of the University on the Tuscaloosa campus.



Dr. McCafferty

After two years, he transferred to Tulane Medical School, receiving his M. D. degree from that institution in 1940.

A year of internship at Charity Hospital, New Orleans, followed but his first year of residency at the same hospital was inter-

rupted by World War II. In January, 1942, he entered the Navy and was a member of the first mobile hospital unit sent into the South Pacific.

Dr. McCafferty and his shipmates landed on the island of New Hebrides where plans to construct a hospital were repeatedly frustrated by the necessity for building additional fortifications.

One day the U. S. S. destroyer McFarland put into port in need of a doctor. A bored Dr. McCafferty volunteered to go aboard for a 10-day period. He remained two and one-half years, a stint which encompassed the invasion of Guadalcanal.

When the war ended, Dr. McCafferty had completed his sea duty requirement and asked for shore duty. A Pentagon official inquired as to his preference of bases.

"Either the Gulf of Mexico or the Atlantic," he replied. "I'm sick and tired of the Pacific."

So he was stationed at Key West, which is about as midway between the Gulf and the Atlantic as one can get.

Christmas Eve of 1945 saw Lieut. Commander McCafferty back at home in Mobile and ready to resume his residency training.

Mrs. McCafferty is the former Corinna Herndon of Mobile, a childhood sweetheart. They have three children: Emit Luther McCafferty III, who will be graduated from the University of Alabama this fall and will enroll in law school; Miss Corinna McCafferty, a senior, and Miss Elizabeth McCafferty, a sophomore, at Julius T. Wright School for Girls at Mobile.

Aside from being a camellia fancier, the new President-elect has no hobbies. He is president of the Mobile Touchdown Club, a director of the Mobile Symphony Orchestra Association, and a member of the Senior Bowl Committee.

He is a past president, and is now a director and secretary of the Mobile Infirmary medical staff. He also served as an officer

of the now-defunct Gulf Coast Medical Society.

Several years ago he received a MASA commendation for his work, in collaboration with the late Dr. George Washington Carver, relating to pellagra.

Code-a-Phone Available

The University of Alabama Medical Center Library offers a new service to its patrons. It is the Code-a-Phone, a tape recording device which receives requests for library information between 5 P. M. and 8 A. M. and on Sundays and holidays. The Code-a-Phone automatically answers the phone, gives taping instructions to the caller and then records the information request. When the library reopens, the tape is replayed, and all information is gathered for the caller that day.

It is important to remember that the after hours number for the Code-a-Phone is 325-4229 instead of the number listed in the telephone directory. Within the Center, simply dial extension 4229.

This service is available to all physicians, dentists and members of the Medical Center faculty.



"Disagree with me now, if you wish, but the autopsy will prove I was correct."

Reprinted from **Journal MSMA**

Several Changes Made By University Medical Center

John W. Benton, Jr., M. D., Director, Clinic for Developmental and Learning Disorders, announced several recent changes for The Diagnostic Clinic for Mentally Retarded Children, Department of Pediatrics, University of Alabama Medical Center, Birmingham, Alabama. They are:

1. The Clinic name has been changed and will now be called the *Clinic for Development and Learning Disorders*. The address will remain the same as above.

2. A Physician's referral is required in writing, giving pertinent information about the child's problem, parent's name and address, and the child's birthdate.

3. The age limit, which has previously been five years, has now been raised to serve children through *twelve* years of age.

4. We are particularly interested in receiving referrals of children who are presenting learning problems or medical and/or neurological problems, where mental retardation might be suspected. A screening committee has been organized for evaluation of all referrals since at times, the patient has previously had an excellent work-up and diagnosis and we would feel that we had nothing further to offer the child or family.

5. We now have limited funds to hospitalize children with difficult diagnostic problems on a selective basis after all outpatient studies have been made through this Clinic. No charge is made to the parents for this service, however, we call upon the family insurance, if available. Parents are responsible for financing transportation, room, and board, if they choose to remain in Birmingham during the child's hospitalization.

VALIUM[®] (diazepam)Roche[®]

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions)

Supplied: Valium[®] (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.



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IMPORTANT NEW INSIGHTS INTO HUMAN RESPONSE TO EMOTIONAL STRESS:

Impressive new confirmation of the effectiveness of Valium® (diazepam)

Ask your Roche representative to arrange a presentation of this important and fascinating new technique of research in emotional stress—a new methodology...quantitative, objective measurement with double-blind controls.

Please see opposite page for important describing information.



1967 National Medico-Legal Symposium

By Thos. B. Hill, Jr.

Counsel For The Medical Association of the
State of Alabama

The 1967 National Medico-Legal Symposium, jointly sponsored by the American Bar Association and the American Medical Association, was held March 9-11, 1967, at the Fontainebleau Hotel, Miami Beach, Florida. It was my happy privilege to attend this very important and constructive meeting, as one of the Counsel for the Medical Association of the State of Alabama; and, I believe it would be of interest to the membership of both the Medical Association and the Alabama State Bar to have a brief review of the very interesting program which was presented to the group of approximately one thousand doctors and lawyers who were in attendance.

After a most hearty and thoroughly complete welcome by Bernard D. Hirsh, Esq., Director of Law Division, American Medical Association, Percy E. Hopkins, M. D., Chairman, American Medical Association Liaison Committee to American Bar Association, Richard W. Galiher, Esq., Chairman, American Bar Association Committee to Cooperate with American Medical Association, Charles L. Hudson, M. D., President, American Medical Association, and Orison S. Marden, Esq., President American Bar Association, the first session of the program opened.

The moderator, Dr. James Z. Appel, of Lancaster, Pennsylvania, in the beginning made reference to the fact that in the past, from time to time, the relationship between the medical and legal professions had not always been too cordial, but on the contrary frictions and misunderstandings had arisen between the two professions which had been most unfortunate and detrimental to the interests of both professions. He called attention of the Interprofessional Code which was



Thos. B. Hill, Jr.

adopted by both professions, through their respective national organizations, in 1958 and gave credit to the adoption of that Code for the greatly improved relations between the members of both professions since its adoption. He stated that the purpose of this symposium was to improve further the interprofessional relationship between the medical and legal professions, both of whom are of ancient origin and of honorable history, both devoted and dedicated to the rendition of service to their fellow man. (Incidentally, for information, copies of this Interprofessional Code are available by writing to: Division of State & Local Bar Services, American Bar Association, 1155 East 60th Street, Chicago, Illinois 60637.)

The first session of the program consisted of panel discussions by prominent and outstanding representatives of both professions upon the subject: "Roadblocks in Interprofessional Communications." Limitations of time and space prevent a comprehensive coverage in this report of the several papers

and discussions upon the subject, but the writer will undertake to mention the highlights of the discussions.

A. The first question discussed was: "Is Cross-Examination Necessary?" This topic was the subject of a paper by William E. Stewart, Esq., a prominent attorney of Washington, D. C., who began his discussion with an acknowledgement that the fear and apprehension of an unfair cross-examination by hostile counsel was one of the contributing factors to the reticence of members of the medical profession to go to court, and that this seeming lack of cooperation by the doctors with lawyers primarily concerned with personal injury litigation had been the origin of much of the friction between the membership of the two professions. The speaker then proceeded to explain the indispensable necessity of cross-examination in the search for truth, which should be the rightful objective in every litigated case. He traced the history of trials, calling attention to the ancient method of settling disputes by trial by ordeal, followed by custom of settling issues by trial by battle, and compared same with modern trials by jury. He pointed out that the necessity and propriety of cross-examination is uniformly recognized in our modern Rules of Procedure, in force in our courts today. Medicine is not an exact science, as we all know, and there are frequently differences of opinion among medical witnesses, which opinions, when presented as evidence to a jury of laymen unfamiliar with medical science and terminology, creates confusion which can frequently be clarified to the jury by skillful cross-examination of such medical witnesses; and, such cross-examination will aid the jury in separating truth from falsehood, should such there be, in the case.

The speaker emphasized the necessity for preparation by both counsel and witness for cross-examination, stating that preparation by the lawyer is more essential to a successful and effective cross-examination than is capability. He condemned and excoriated (and, I may add, very properly so) those

lawyers who sought to discredit a medical witness, or any other witness for that matter, by an unfounded and unjustified attack upon his character, reputation or credibility, calling attention to the condemnation of such conduct by Canons 18 and 22 of the Code of Ethics of the American Bar Association.

The speaker concluded by suggesting that the lawyer and his medical witness should confer, that they should assemble and examine all hospital and doctors' record, and go over very carefully the testimony of the witness before the trial, making sure of the medical authorities supporting the witness's testimony; and, when so fortified, the medical witness would have little to fear from cross-examination by opposing counsel.

B. The next panelist, Clinton L. Compere, M. D., of Chicago, Illinois, discussed: "Is There Such a Thing as Unbiased Medical Evaluation?". He answered his question in the affirmative, but acknowledged that it is very rarely seen. Doctors are human, said the speaker, and many factors, often subconsciously—but none the less effectively, can influence a medical evaluation of an injury; such as, for instance, sympathy for a claimant, loyalty to the patient, and in some cases an innate hostility toward the financial stature of the defendant or his insurance carrier.

The speaker then explained the Illinois system of obtaining non-partisan medical testimony in individual cases, upon request of counsel for either party or of the court. He explained that the plan had originated in New York, and had been adopted in Illinois and in several other states, and that it had worked with tremendous success in his State of Illinois. He described the plan in detail, stating that a group of specialists in various medical fields were selected by the Medical Association and were available upon request for appointment to evaluate a case.

Demand is made by counsel for either party, or by the court in a given case, for a non-partisan evaluation of the case. The demand is served upon the Clerk of the court

in which the litigation is pending, who in turn passes on the demand to the Office of the State Medical Association; and, a specialist or panel of specialists in that field is selected to evaluate the particular case in which the demand was made. All records of previous examinations by other doctors, statements by the claimant, x-rays, and other relevant material is submitted to the specialist or panelists, as the case may be, who make an independent examination and submit their diagnosis, prognosis and evaluation. Their full report is returned to the Clerk of the court, who distributes copies to the interested parties.

The routine is designated "IMT," for "impartial medical testimony"; and, Dr. Compere reported that it had been most favorably received in Illinois. He stated that, while such evaluation was not binding upon either of the parties to the case, it has resulted in the settlement of many cases that would otherwise have been tried (65% of personal injury cases) and has thereby contributed much to the elimination of court docket congestion in Illinois. He provided some interesting statistics, stating that, in the cases in which resort had been taken to "IMT," demand for such evaluation had been made by the court in 9.5% of the cases; by plaintiff's counsel in 27% of the cases; by defendant's counsel in 39.7% of the cases; and, by stipulation of both parties in 23.8% of the cases.

The speaker concluded with the observation that "IMT" is as impartial an approach to cases where there is a difference of opinion among medical witnesses for the respective parties litigant as can be found; and, while there may not be such a thing as a fully and completely unbiased medical evaluation of a case, "IMT" provides the closest approach known.

C. The next item on the program was a discussion of the question: "What is 'Reasonable Medical Certainty'?" John C. Shepherd, Esq., a prominent member of the Bar of the City of St. Louis, Missouri, was the

speaker. He observed that approximately 85% of litigation in our courts today represents personal injury suits which require medical testimony. He reviewed the ordinary rules of evidence which permit the lay or non-expert witness to state only facts, no opinions or conclusions, to the jury or court trying the case, and noted the exception to the general rule that opinions or conclusions are not admissible, in that opinion evidence of a specialist in a given field, such as a doctor, is admissible evidence; and, such a specialist is permitted by law to express his opinion and conclusions based upon the facts in the case. This is upon the premise that the specialist or expert is particularly learned in that particular field and his opinion is based upon research and personal experience and can, therefore, be most helpful to the jury in ascertaining the truth. "Reasonable Medical Certainty" of the doctor means his opinion, based upon scientific research and conclusions aided by his own personal experience in that field.

The law does not require, said the speaker, that the doctor be absolutely certain, but only that he do his best, that he be diligent in his research and preparation, and that his opinion be based upon the accepted scientific conclusions and his own personal experience. A doctor's opinion, when so based upon the best knowledge that scientific research and investigation has disclosed, coupled with his own personal experience, is admissible in evidence and satisfies the requirement of "Reasonable Medical Certainty," even though it must be admitted that medical science has not conclusively or unanimously approved the correctness of such opinion.

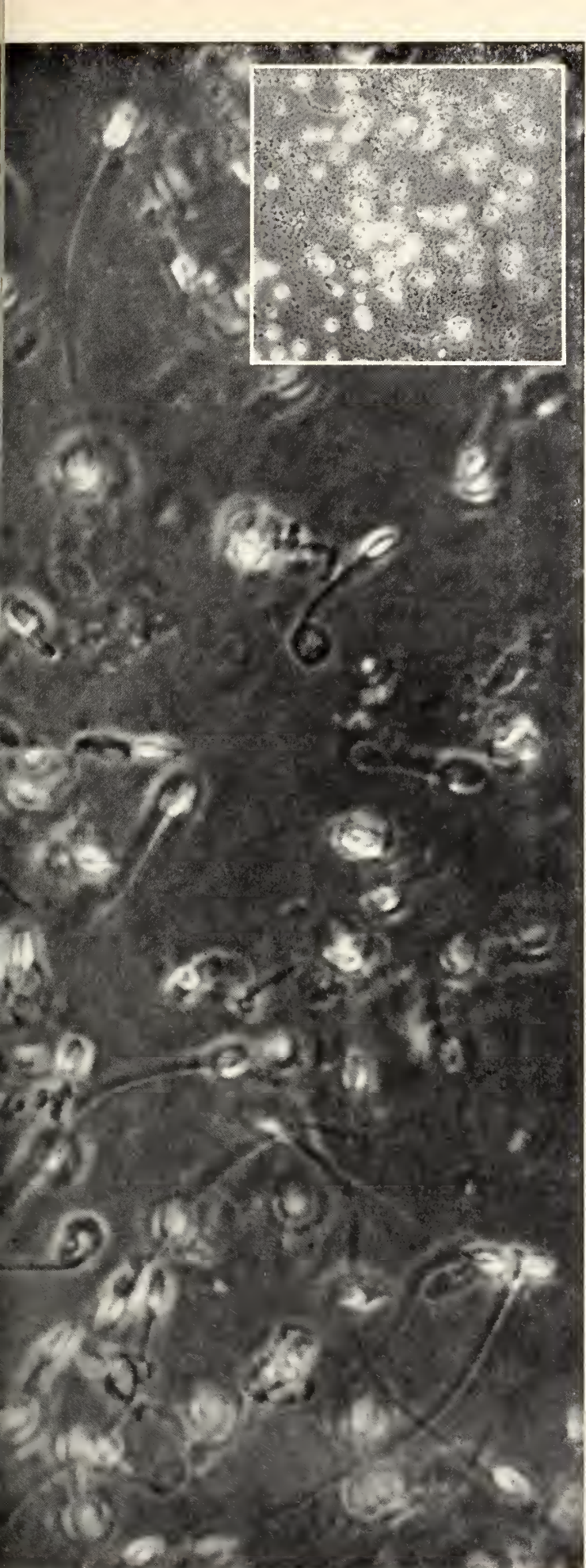
D. "Compulsory Court Attendance." Dr. Harold Williams, who is also a member of the Bar, of San Francisco, led the discussion on this subject.

The speaker addressed his remarks to three different categories of medical witnesses:

1. The doctor who has treated the patient.

(Continued on Page 1386)

New view of an oral contraceptive at work

A large, dark, grainy microscopic image showing numerous spermatozoa with long, wavy tails. In the upper left corner, there is a smaller, square inset showing a different view of spermatozoa, which appear more clustered and less motile.

Although suppression of ovulation remains the primary mode of action of oral contraceptives, newer knowledge indicates that products like Norinyl-1 — which provide the combined action of both low-dosage progestogen and estrogen for the full treatment cycle — offer multiple contraceptive action that helps explain their unexcelled record of effectiveness. This report explores the secondary protective mechanisms against unwanted pregnancy offered by combined hormonal administration and the importance of the progestational agent in making such multiple contraceptive action possible.

Accumulating evidence has indicated that sparse, highly viscous cervical mucus has an adverse effect on the motility and survival of spermatozoa.

The estrogen-opposing progestational ingredient of Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.) reverses the usual mid-cycle picture of a thin, watery cervical mucus. The result — a built-in barrier that inhibits sperm from reaching the ovum should one be released. The inset in the adjoining photograph shows immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

How the estrogen-opposing action of Norinyl-1 creates a hostile cervical mucus

Normally estrogen activity during the fertile midcycle stimulates the production of cervical mucus. The mucus at this time is profuse and watery—allowing maximum sperm motility and promoting penetration.

But what happens when Norinyl-1 is administered? Its potent progestogen, norethindrone, opposes estrogen stimulation of cervical mucus. Consequently, the amount of mucus decreases and its viscosity increases. This results in a sparse but thick mucus barrier that diminishes the vitality of the sperm and impairs its powers of penetration.

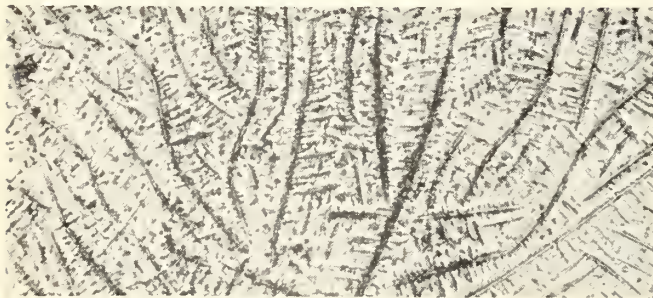
How hostile cervical mucus supports contraceptive action

The importance of these observations to the effectiveness of Norinyl-1 has been noted in a report on 89 patients taking this medication.* In all instances, cervical mucus obtained from cycle day 5 to cycle day 29 appeared scant and thick and exhibited little or no Spinnbarkeit. In the opinion of this investigator, the effect on cervical mucus may be sufficient to prevent conception. *Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

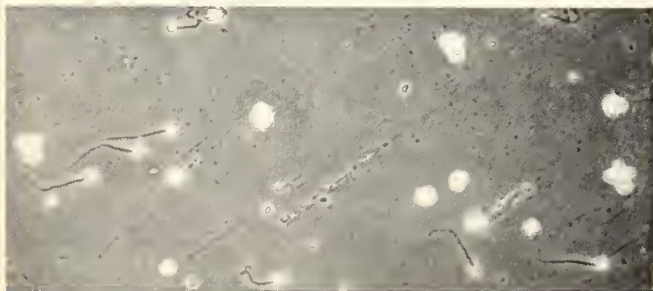
Normal cervical mucus at midcycle in untreated patient permits sperm motility... promotes sperm penetration.



Cervical mucus is thin and watery with a stretchability (Spinnbarkeit) of 15 to 20 cm.



Thin, watery mucus crystallizes into this well-defined, fernlike pattern within a minute.

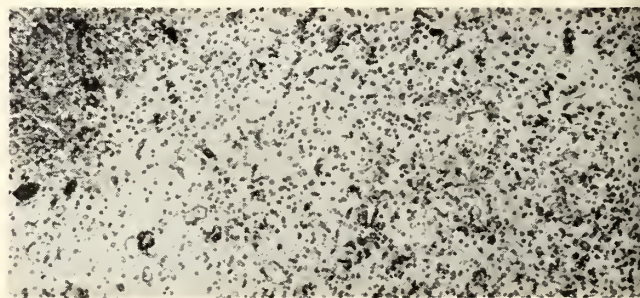


Spermatozoa appear healthy, are active and freemoving.

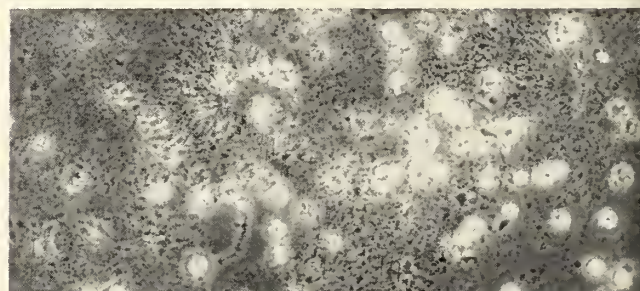
Hostile cervical mucus at midcycle produced by Norinyl-1 impairs sperm vitality... inhibits penetration.



Cervical mucus is scanty, thick and viscous. Spinnbarkeit is 1 cm. or less.



In thick, hostile cervical mucus the fern pattern is poorly defined or absent.

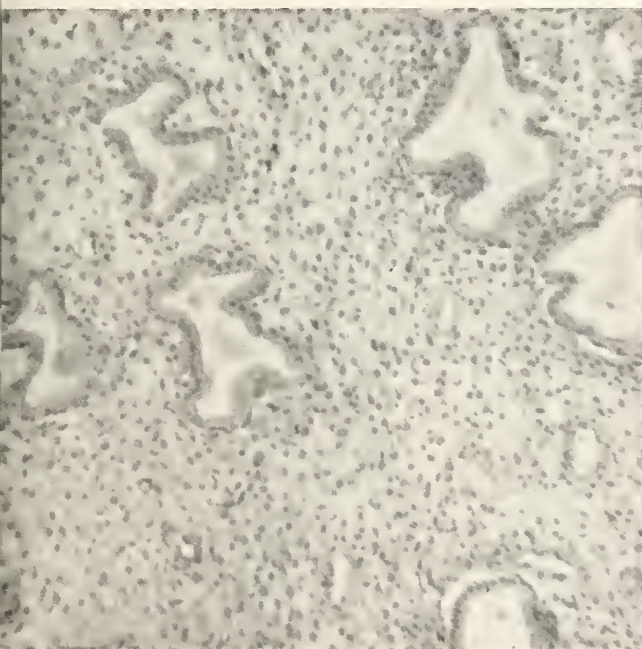


Immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

An endometrium unreceptive to nidation— another supporting contraceptive action of Norinyl-1

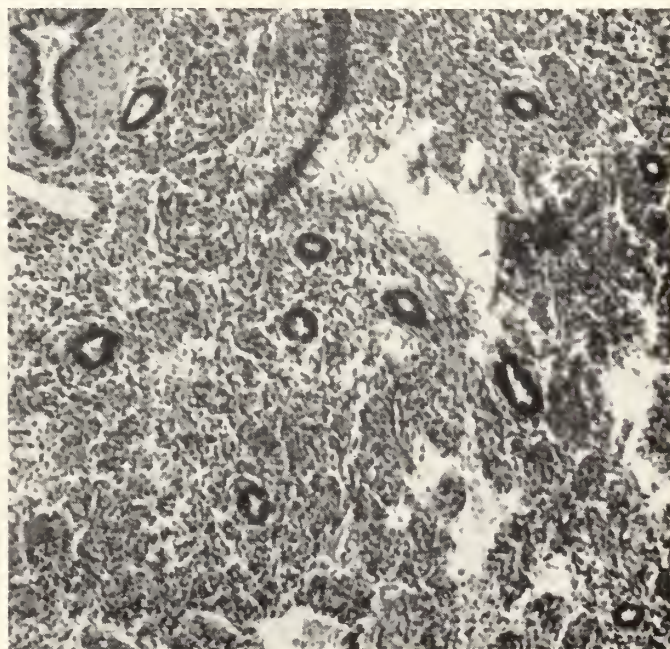
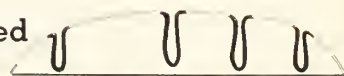
Let us suppose that an ovum is released—as occurs in an occasional, rare case—and somehow a sperm succeeds in penetrating the cervical mucus barrier? Should this come about, the additional action of Norinyl-1 may protect the patient from unwanted pregnancy—progesterone intake makes endometrial tissue unreceptive to implantation.

Endometrium of
untreated patient



Normally the endometrium progresses through a proliferative phase stimulated by estrogen and a secretory phase stimulated by progesterone. During the secretory phase the endometrium is receptive to the fertilized ovum.

Unreceptive
endometrium produced
by Norinyl-1



When Norinyl-1 is administered its progesterone component—norethindrone—accelerates the secretory phase, suppressing glandular development. From day 11 on, secretory action is no longer present. The result is that during the latter half of the cycle the endometrium becomes unreceptive to egg implantation.

new
Norinyl-1
tablets

(norethindrone 1mg \bar{c} mestranol 0.05mg)

for multiple contraceptive action

effective fertility control
on half the previous dosage
maintains ratio
of the established
norethindrone/mestranol
combination

lower cost

new Norinyl-1[®] (norethindrone 1mg. \bar{c} mestranol 0.05mg.) tablets

Reduction of oral contraceptive dosage to lowest effective levels has become a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now available in a new strength in which both norethindrone and mestranol are reduced 50 percent. Studies show that Norinyl-1 achieves fertility control with only 1.05 mg. of combined progestogen and estrogen per tablet.

Norethindrone was first reported for use as a progestational agent in human beings in 1955. Norethindrone 2 mg. with mestranol 0.1 mg., as an oral contraceptive, is currently in use by over 2,000,000 women. Clinical experience now establishes that Norinyl-1 also amply meets the criteria of reliability and safety.*

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

PRESCRIBING INFORMATION

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia, or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of Norinyl-1 in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with Norinyl-1. Therefore, if such tests are abnormal in a patient taking Norinyl-1, it is recommended that they be repeated after the drug has been withdrawn for 2 months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibroids may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac, or renal dysfunction, require careful observation. 5. Although a cause and effect relationship has not been established, Norinyl-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, as in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are

indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged Norinyl-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Norinyl-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. A cause and effect relationship has not been demonstrated. 11. Because of the effects of estrogens on epiphyseal closure, Norinyl-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask the onset of the climacteric. 13. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following adverse reactions have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma, breast changes (tenderness, enlargement and secretion), loss of scalp hair, change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, erythema multiforme, erythema nodosum, hemorrhagic eruption, migraine, rash (allergic), itching, rise in blood pressure in susceptible individuals, mental depression.

The following occurrences have been observed in users of oral contraceptives. A cause and effect relationship has not been established: thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory results may be

altered by the use of oral contraceptives: increased bromsulphalein retention and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metapyrone test, pregnanediol determination.

Other side effects reported to have occurred in association with use of this drug are dizziness, hirsutism, pains in legs, back, chest and abdomen, dysuria, drowsiness, vaginal discharge, libido increased and decreased, eruptions, hypermenorrhea, hypomenorrhea, increased appetite, G.U. infections, varicose veins, abdominal fullness, acne, headache, nervousness, allergies, blurred vision, pain in eyes, and itching in eyes. For complete clinical data, see package insert.

Dosage and Administration: 1. One tablet of Norinyl-1 is administered orally for 20 days beginning on day 5 of the menstrual cycle. (Count day 1 of the cycle as the first day of menstrual bleeding.) Repeat this dosage schedule for each cycle. 2. If no menstrual period occurs after a cycle of treatment (20 tablets) in which patient adhered to the schedule, the patient must be instructed to resume taking the Norinyl-1 tablets 7 days after the previous 20-day course was completed. For example, if the last pill of a previous cycle had been taken on a Sunday, then a new cycle of treatment should begin on the following Sunday. 3. In the postpartum woman, it is recommended that the first cycle of treatment should begin on day 5 of the first menstrual cycle. However, Norinyl-1 should not be administered during lactation.

Availability: Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.)—Dispensers of 20 and 60 and bottles of 250 tablets.

norethindrone — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

In Alabama . . .

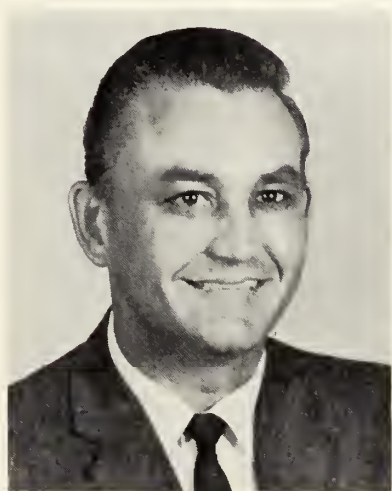
These Syntex men serve the physician



Robert Boothe
Birmingham, Alabama
853-0406



Ernest Haydel
Mobile, Alabama
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362-8898



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INFLAMMATION: A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

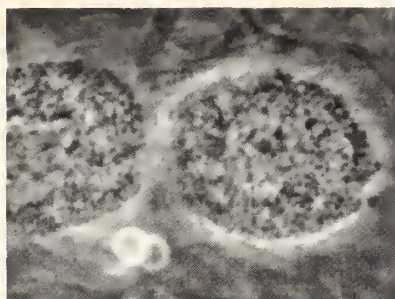


Visual evidence of how corticosteroids influence the inflammatory reaction

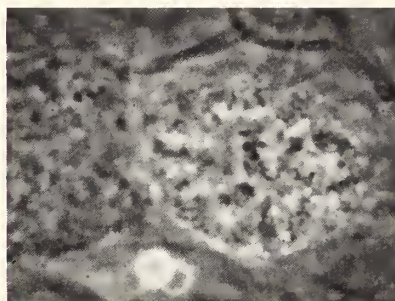
Working with phase-contrast cinematography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



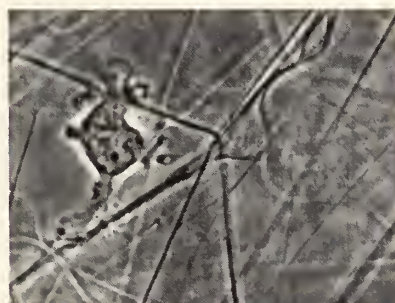
Phase-contrast microscopy showing mast cell before injury.



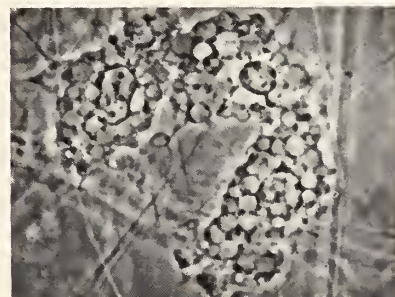
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

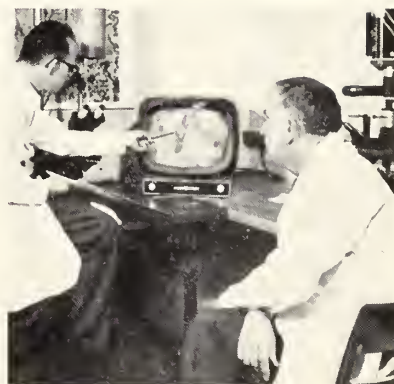
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid—Synalar (fluocinolone acetonide)—the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.

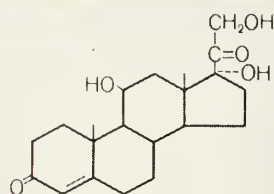


In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

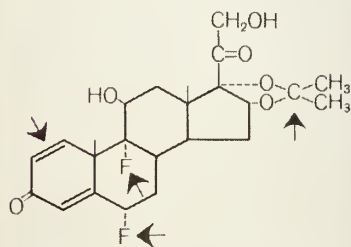
*A New View of Corticosteroid Action in Inflammatory Dermatoses, a film based on this study, is now available from your Syntex representative.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more corticosteroid. And it can often do it more effectively.



Hydrocortisone



Fluocinolone Acetonide (Synalar)

- ☐ a double bond between carbons 1 and 2
- ☐ fluorine substitutions at both the 6- α and the 9- α positions
- ☐ the addition of the acetonide at the 16- α , 17- α positions, thus providing one of the most potent topical corticosteroids available.

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY¹⁻⁴ is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B— injected with 1, 2 and 4 mg. of hydrocortisone—show progressively smaller thymuses as does Group C— injected with fluocinolone acetonide—but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY¹⁻⁴ also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. **PRECAUTIONS:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for pro-

longed periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. **SIDE EFFECTS:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. *Ann NY Acad Sci* 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. *Proc Soc Exp Biol Med* 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: *Methods of hormone research*, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

For inflammatory
dermatoses...
by any measure
a topical corticosteroid
of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram
one of the most active topical
corticosteroids available

Rapid and predictable
in antiinflammatory and
antipruritic activity

Results often comparable to
those of systemic corticosteroids
with fewer hazards

MEDICO-LEGAL SYMPOSIUM

(Continued from Page 1376)

Should he be compelled to come to court to testify in his patient's suit for damages for his personal injuries? After alluding to the usual preference of the doctor not to go to court, he called attention to the duty of the doctor to assist his patient in obtaining redress for injuries sustained at the hands of another, and stated that it was without question the duty of the doctor to go to court and testify as to the facts, the nature and extent of the injuries, and his evaluation of the case, if such court attendance was necessary to obtain for his patient just and adequate compensation for his injuries. A medical report, written by the doctor, not ordinarily or generally being admissible in evidence, would not suffice in such case; and, the speaker made it clear that in such case, where the doctor in attendance upon his patient refused to go into court voluntarily, there is not only no reason, ethically or morally, to withhold a subpoena to such doctor but, on the contrary, it is the lawyer's right, prerogative, and his duty to cause such non-cooperating medical witness to be subpoenaed and forced to come into the court and testify, to the end that his client would receive justice at the hands of an informed jury.

2. In case of a doctor who has not treated or even seen the patient and who has had no connection with the case, but whose professional opinion, based upon a hypothetical question assuming the facts existing in the case at bar, is desired, a different rule applies. There is no duty or obligation, said the speaker, upon such a medical practitioner or specialist to testify. Being under no duty and owing no obligation to anyone, there would certainly be no justification for requiring the compulsory attendance of such witness.

However, the speaker pointed out, there may be an exception to that rule, as in a case where the question involved was one in the field of, for instance, orthopedic surgery, and there was only one specialist in that

field within the range of a subpoena, and such specialist refused to go into court voluntarily and testify. Under such circumstances, observed the speaker, compulsory court attendance by such specialist would be justified.

3. In the case of a physician who has not treated or seen the patient and has had no connection with the case, but who has, nevertheless, rendered a gratuitous or informal opinion, and refuses to go to court. An example cited by the speaker was a case in which a doctor in a casual conversation expressed an opinion that a certain patient had been injured by improper treatment by one of the doctor's colleagues, but who expressed his unwillingness to go to court and so testify. Such doctor, said the speaker, should certainly be subpoenaed to go into court in a subsequent suit for malpractice brought by the injured patient against the doctor who treated him, and testify as to the basis of his opinion as stated in the casual conversation mentioned.

E. The next item on the agenda for discussion was the question: "Why Contingent Fees?"; and, Alabama's eminent and distinguished Attorney Francis Hare, of Birmingham, was assigned this topic.

Mr. Hare first defined "contingent fees" as an agreed percentage of any amount recovered in a case, with the understanding that no fee would be paid if there were no recovery in the case. He observed that contingent fees were illegal in divorce cases, criminal cases and the like in the United States and, also, pointed out that contingent fees are illegal and forbidden in all cases in England and Canada.

He suggested that the principal objection advanced against contingent fees in personal injury cases is that it may give the lawyer such an interest in the case as to cause him to do things he should not do to win the case, and Mr. Hare then shattered that argument by citing the truism that any lawyer who does not already have an overwhelming desire and enthusiasm to win his

case, with or without a contingent fee arrangement, is no more a first rate lawyer than is a doctor not a first rate doctor who does not have an overwhelming desire to cure his patient.

Mr. Hare went on further to state that an arrangement for a contingent fee made it possible for an indigent client, equally as well as affluent client, to obtain the services of competent counsel in personal injury cases; and, secondly, contingent fee arrangements have the effect of discouraging groundless claims or litigation, for the unprincipled or unethical lawyer would not care to encourage litigation without merit if his compensation is dependent upon the amount of recovery. Mr. Hare discussed his subject in his usual and inimitable way, interspersing his remarks with his well-known wit and humor; and, his participation was judged by many of his listeners to be certainly one of the highlights of the program.

F. "Compensation for the Medical Witness." Kent L. Brown, M. D., of Cleveland, Ohio.

Dr. Brown opened his discussion with the observation that the relationship between lawyer and doctor in the courtroom would be greatly improved, if a better understanding existed between them. He stated that all too often the lawyer failed to understand that the doctor's allegiance as a witness is to truth, and not to the attorney who engaged his services. (This, of course, is not true as to Alabama lawyers.)

In discussing the matter of compensation for doctors, he drew a distinction between (1) the doctor who had treated the patient (plaintiff), and between whom the relationship of doctor and patient existed when he was called to testify as to the nature and extent of the patient's injury and the treatment administered, with his prognosis, in which event the doctor is under the ethical and moral obligation to his patient to appear and give testimony as to the facts; and, (2) the doctor who is employed by the lawyer

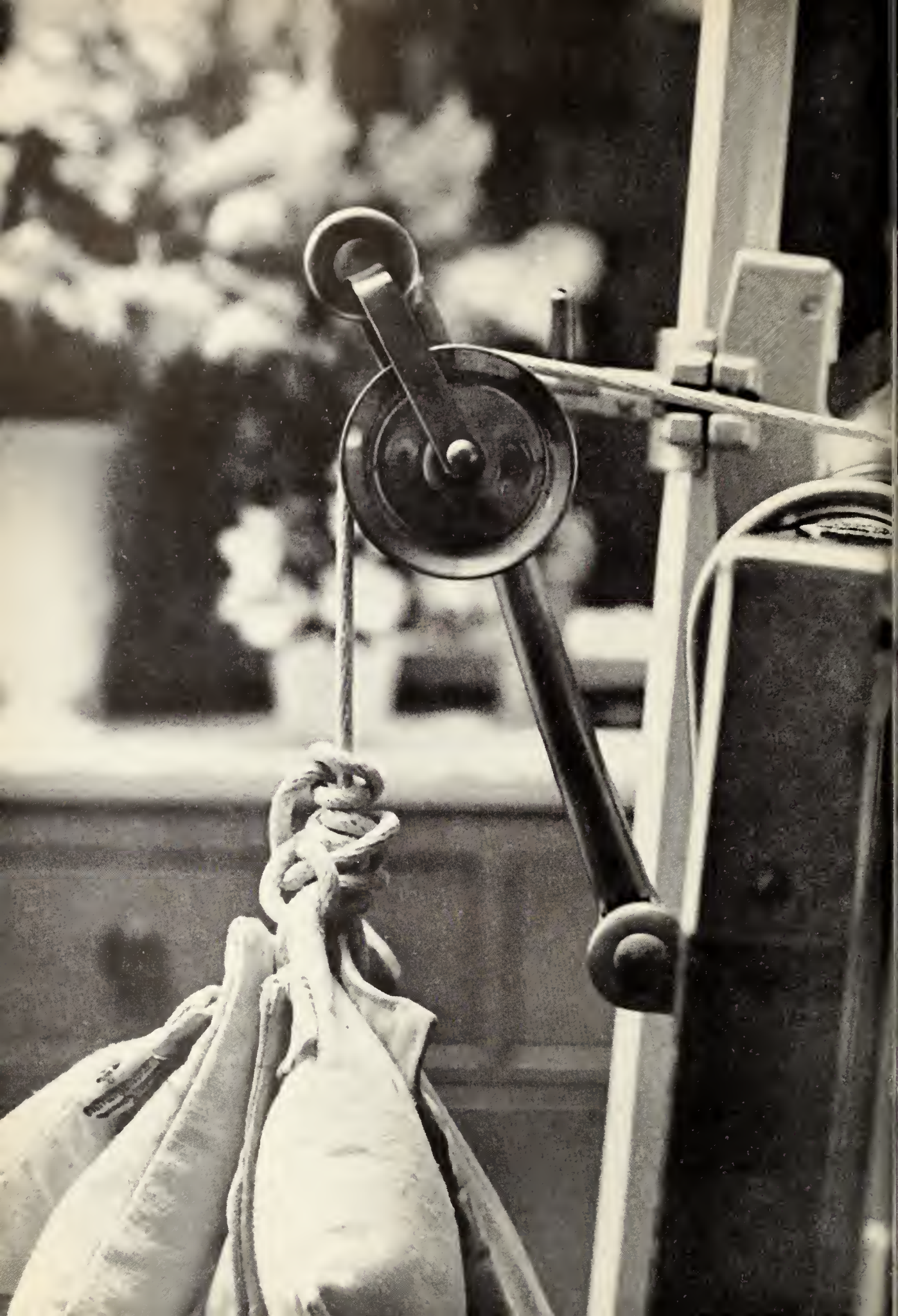
to testify as an expert, who is under no legal, ethical or moral obligation to testify; pointing out that as to the latter, when he is called into a case and his professional opinion, based upon the facts in the case, is requested and submitted, and he voluntarily agrees to accept the assignment, he thereupon becomes an "expert witness" and is entitled to be compensated as such.

While there is no exact formula for determining the amount of compensation to which the doctor is entitled in such cases, said the speaker, many factors should be considered: such as, the qualifications and prestige of the doctor; the complexity of the case; the time required to ascertain the facts and research the question and generally to prepare for the presentation of his opinion and testimony. He recommended that in all such cases the amount of compensation be agreed upon in advance between the lawyer and the doctor, except in those cases where such compensation is fixed by the court or by some other formula or statutory provision.

In all such cases, the speaker pointed out, it was the responsibility of the lawyer to see that the compensation should be paid, even to the extent of providing a personal guarantee that it would be paid in all events, irrespective of the outcome of the case.

He, also, added that, in those cases where the physician who treated the claimant was required to testify, while there was no personal obligation of the attorney to pay such doctor for his services in treating the patient and, also, in appearing to testify, there was and is a moral duty on the part of the lawyer for the patient to protect the doctor in every possible way (a duty which the speaker said was frequently overlooked by the lawyer), by deducting the doctor's compensation from the amount collected and remitting same direct to the doctor, in those doubtful cases where the patient would probably not pay the doctor for his profes-

(Continued on Page 1390)





TABLETS

Equagesic[®]

(meprobamate and
ethoheptazine citrate with
aspirin)



Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.
Wyeth Laboratories Philadelphia, Pa.

Weighing on his mind, too

When pain evokes anxiety and tension, thereby heightening patient discomfort, a simple analgesic may only touch on part of the problem.

This single-prescription, non-narcotic product, however, usually provides effective analgesia *and* helps put the patient's mind at ease.

MEDICO-LEGAL SYMPOSIUM

(Continued from Page 1387)

sional services rendered, or for his appearance in court.

Second Session

A. "How a Physician Should Choose His Lawyer?" Discussion by Charles J. Frankel, M. D., LL. B., Charlottesville, Virginia.

Dr. Frankel, who holds both the M. D. and LL. B. degrees, and who is Associate Professor of Orthopedic Surgery and Instructor in Medical Law at the University of Virginia, presented a most interesting paper upon the above subject. He recommended that his professional brother in medicine should be most careful in the selection of his attorney; that he make a careful and painstaking investigation of the background, training, capability, experience, ethical and professional reputation of the attorney before making a final selection.

He called attention to the fact that, while the American Bar Association recognizes only two **special fields** of the law, i. e. admiralty and patent law, all others being general practitioners, both the legal and medical professional fields in recent years have so expanded that specialization in each profession has become the order of the day; that there are lawyers who practice or specialize in taxation, criminal law, trusts, probate law, which includes preparation of Wills and administration of estates, real estate law, personal injury actions and other civil litigation, and many other fields which might be mentioned.

He suggested that the doctor determine the nature of his particular problem, for which he desired the services of an attorney, and that he then select an attorney who was a specialist in that particular field of the law; that he arrange an interview and discuss fully his problem, divulging all facts incident thereto, and have a full and frank discussion with the attorney so selected as to his fee for such services; or, if same were not then capable of definite ascertainment,

that a formula for the determination of same be agreed upon, or at least that the amount of same be approximated, thereby eliminating the possibility of subsequent misunderstanding or disagreement over same.

He cautioned his colleagues in the medical profession against trying to "do it yourself," pointing out that so often such an attempt by a doctor or other person unskilled in the law could produce disastrous results. He referred to leases and contracts of various kinds which appeared so simple to the unwary and inexperienced, but for which the law required certain formalities without which such documents are void. He specifically mentioned a recent publication entitled "How to Avoid Probate," which has achieved wide circulation, and strongly recommended against its use by the members of the medical profession, or others without legal training and experience, pointing out many dangerous consequences which could so readily follow its use, such as, to mention only one, increased estate tax liability that could so easily have been avoided by utilization of the services of one skilled in that field of the law.

B. "Estate Planning for the Physician." Daniel M. Schuyler, Esq., of the Chicago Bar, and a member of the faculty of Northwestern University Law School.

The speaker suggested that, while estate tax savings was most certainly a factor to be considered by the head of every family group, such was not the only question to be considered in estate planning. He recommended that the physician should first consider carefully and decide what disposition he desired to make of his estate, the designation of the beneficiaries and the provision to be made for each of them, and then that the estate be tailored to effectuate the desired results, bearing in mind at all times the tax problem.

He pointed out, how, by perfectly legal means, very often through the use of various devices authorized by the tax laws, such as the creation of trusts, taking advantage of

the marital deduction provisions of the estate tax laws, the making of gifts during life, and others, the ultimate purpose and desire of the party to distribute his estate as he wished could be accomplished with maximum tax savings. He suggested that a capable attorney skilled in the preparation of Wills and experienced in the application and administration of the estate tax laws be consulted; that a full and complete disclosure of the size and character of the doctor's estate be revealed to the attorney selected, by whom such information would be treated in strictest confidence; that the doctor explain his purpose and intent and desires with reference to the distribution of his estate; whereupon both parties would discuss and give careful consideration to numerous questions which would arise in connection with plans for the administration and distribution of the estate: such as, for instance, the sufficiency of the estate to provide an academic and professional education for the children; the need for life insurance to supplement the estate; the frugality of the members of the family and their ability to wisely invest and administer their respective shares of the estate; the desirability of conversion or change in the character of some or all of the assets of the estate; the compatibility of members of his family and the probability of their being able to work together harmoniously in administering the estate; the need and desirability of making gifts during his lifetime; and, the advantages of creating trusts and of selecting and designating a corporate trustee or trustees, and personal representatives to administer the estate.

The attorney would explain the significance and the highly desirable tax savings to be achieved by use of the marital deduction provisions of the estate tax law, which permits one spouse to leave to the other spouse one-half of his or her adjusted gross estate as defined in the statutes, either outright or in trust provided absolute power of disposition by gift or by Will is conferred upon such spouse to whom or for whose

benefit such one-half of said adjusted gross estate is devised, thereby relieving such half of said adjusted gross estate from estate tax liability upon the death of the spouse making the Will. He would, also, explain the law which permits a party to use what is known in the gift tax statute as his "lifetime exemption," by making a gift of property of the value of \$30,000 (\$60,000 if the donor is married), free of gift taxes (the lifetime exclusion); and, in addition thereto, the donor may make as many individual gifts each year of the value of not exceeding \$3,000 (\$6,000 if the donor is married) as he may desire, without gift tax liability, provided no one individual donee can receive more than one such gift during the year. Such gifts, provided they are not made within three years prior to the donor's death (in which event they would be presumed to have been made in contemplation of death and would in such event not be allowed as exempt), are tax exempt.

The lawyer would in the course of the conference also, no doubt, call to the doctor's attention the statute which permits the wife in any event and for any reason, in her sole discretion, to dissent from the Will and take that part of the estate to which she would have been entitled had her husband died without leaving a Will.

He would point out to the doctor his right to create a trust for a certain period of time, and for designated beneficiaries, including himself, which would provide great flexibility of management and relieve the doctor of such responsibility. He would, no doubt, explain to him that under some circumstances the probate of a Will and administration of an estate can be avoided by placing the property in joint tenancy, with the title in full passing to the survivor upon the death of the first of them to die; but, it would also be necessary to explain that such conveyance of the title to the property to joint tenancy would not remove such property from the doctor's taxable estate if same were originally purchased with his funds and no gift tax return were filed by

the doctor showing such gift, as same would under such circumstances be considered a part of the doctor's estate upon his death, for estate tax purposes.

By such joint conference, plan could readily be conceived and developed which would carry out the wishes and desires of the doctor for the distribution of his estate, and with maximum legal tax savings permitted under the law.

C. "What the Doctor's Attorney Should Know." Robert B. Murphy, Esq., General Counsel, State Medical Society of Wisconsin, Madison, Wisconsin.

The substance of this discussion was simply that, when a doctor confers with his attorney upon any subject, whether it be estate planning, a charge of malpractice, however groundless, a domestic relations problem, or a business matter, a full, adequate and complete disclosure of all pertinent and relevant facts and information by the doctor to his counsel is a pre-requisite to an intelligent and proper solution of the difficulty.

D. "Medico-Legal Vignette—Medical Evidence in a Jury Trial." Honorable Grady L. Crawford, Judge of the Circuit Court, Dade County, Florida, presiding. Medical witness: Joseph J. Zavertrnik, M. D., Miami, Florida. Attorneys: J. B. Spence, Esq., of Miami, for plaintiff; Samuel J. Powers, Jr., Esq., of Miami, for defendant.

This was a portrayal of a typical courtroom scene in a personal injury action, demonstrating in dramatic, yet realistic, manner the skillful direct and cross-examination of a medical witness by competent legal counsel, on issues of medical opinion. It was accompanied by a clear and logical explanation of the application of the rules of evidence in such cases, and the reasons for same, thereby clarifying misunderstandings that sometimes exist in the mind of the medical witness concerning trial tactics of counsel. It was a very accurate exemplifica-

(Continued on Page 1399)

Tandearil® oxyphenbutazone

Tandearil in Painful Shoulder

Therapeutic Effects: Stiffness and pain may diminish within 2 days, and full mobility may be restored within a week. These effects are obtained with oxyphenbutazone alone or combined with physiotherapy or local hormonal injections. The drug is usually well tolerated and does not affect pituitary-adrenal function or immune response.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Painful Shoulder: 600 mg. daily in divided doses for 2 to 3 days; 300 mg. daily thereafter. Usual duration of therapy: 2 to 7 days.

Availability: Tablets of 100 mg. 6562-VI(B)R

For complete details, please refer to full prescribing information.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardley, New York

Geigy

Tandearil[®]
oxyphenbutazone

helps painful shoulders
move again



Please see ad-
joining page for
brief prescribing
summary

TA-5094PC

Sperling, I. L.
Applied Therap. 6:117,
1964

Rosenbaum, E. E., and
Schwarz, G. R. North-
west Med. 61:927, 1962

3 out of 4 painful shoulder patients
responded well

84.2% of 127 patients

81% of 48 patients

Why these 7 patients with **moderate to severe anxiety** may respond better to Mellaril

1. The agitated patient.

Anxiety—particularly that beyond the range of minor tranquilizers—frequently is expressed as gross motor restlessness, fidgetiness and purposeless movements, and may erupt into aggressive behavior. Mellaril is almost a specific for those patients whose anxiety follows such a pattern.





the psychosomatic patient.
 family physician is rarely given
 diagnostic luxury of a classic,
 book "anxiety state." Most often
 just probe for anxiety masked by
 ctional disorder—or which exac-
 es a somatic problem. Double-
 evaluations have demonstrated
 Mellaril can be a significant ad-
 in the treatment of such patients.



**the patient under
 emotional stress.**

ril helps the patient deal with
 ses of everyday life. Nonhabitua-
 it can be given for extended pe-
 of time. It does not "separate"
 patient from practical problems
 pressures, does not induce eupho-
 a fuzziness which can compro-
 e the ability to cope with reali-
 es. Rather, it helps the patient
 move more competently in his
 daily world by eliminating use-
 less tension, by allowing him to
 conserve emotional resources
 and energies, and to direct
 them against the problems
 really worth worrying about.



4. The menopausal patient.

The woman who sees change of life as
 the end of useful life requires support
 from both family and family physi-
 cian. Whether the psychological im-
 pact of menopause is directly related
 to hormonal changes, or merely coin-
 cidental, is debatable, but estrogenic
 therapy is frequently inadequate.
 Mellaril is a useful aid for these pa-
 tients and, alone, or in combination
 with reduced estrogen dosage, will
 help ease the menopausal misery.



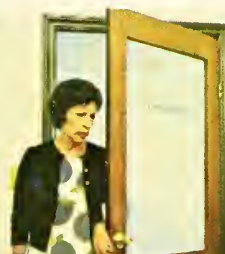
5. The previously hospitalized psychiatric patient.

Such a patient may still require the
 type of medication he has been ac-
 customed to, but because he is no
 longer in a controlled setting the ac-
 ceptable level of adverse reactions
 must be lower. In such circumstances
 Mellaril is perhaps the drug of choice.



6. The agitated geriatric.

Tranquilizer therapy in the elderly
 patient always involves special (or at
 least accentuated) problems: the pos-
 sibility of drug-induced ataxia, hypo-
 tension or depression, for example,
 assumes an additional significance.
 These reactions have rarely been ob-
 served in geriatric patients treated
 with Mellaril.



7. The constantly returning patient.

The anxiety patient who has not re-
 sponded to a minor tranquilizer is not
 very likely to benefit from your minor
 tranquilizer of second choice. A major
 tranquilizer, such as Mellaril, may be
 indicated in such patients.

Contraindications: Severely depressed or comatose
 states from any cause, and in association with or
 following MAO inhibitors; severe hypertensive or
 hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leuko-
 penia, agranulocytosis) and convulsive seizures are
 infrequent. Pigmentary retinopathy has been ob-
 served where doses in excess of those recommended
 were used for long periods of time. May potentiate
 central nervous system depressants, atropine, and
 phosphorus insecticides. Where complete mental
 alertness is required, administer the drug cautiously
 and increase dosage gradually. In addition, ortho-
 static hypotension (especially in female patients)
 has been observed. Epinephrine should be avoided in
 treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extra-
 pyramidal disorders are infrequent; drowsiness, es-
 pecially in high doses early in treatment, may occur;
 nocturnal confusion, dryness of the mouth, nasal
 stuffiness, headache, peripheral edema, lactation,
 galactorrhea, and inhibition of ejaculation are noted
 on occasion; photosensitivity and other allergic skin
 reactions may occur but are extremely rare.

*Before prescribing, see package insert for full prod-
 uct information.*

in moderate to severe anxiety, 25 mg. t.i.d.

Mellaril[®]
 (thioridazine)



A surrealist illustration of a man's back and shoulder. A large, detailed tree with a thick trunk and many branches grows from the man's back. The tree's canopy is a light blue color, while its trunk and roots are brown. The man's skin is a warm, golden-brown tone. The background is a soft, hazy landscape with green foliage and a blue sky. The overall style is painterly and evocative.

at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food^{1,3}

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.^{1,2} Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.^{1,3}

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of

staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Ilosone® 700121
Erythromycin Estolate



(See next page for prescribing information.)

Ilosone® the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone. **Contraindications:** Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to

be definitely related to use of the drug, laboratory findings characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalofluorescent flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given to 2 Gm. of the drug daily for periods of two to six months. Patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who received 250 mg. of Ilosone daily for an average of sixteen months in the treatment of rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevations of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, have been reported in 102 pediatric patients who received short-term (one to ten day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticarial skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally. Ilosone Pulvules®

Ilosone Chewable Tablets

Ilosone Drops

Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of weight, the usual dosage is 5 mg. per pound every six hours. For children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days is recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base) in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 100 size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: *Am. J. M. Sc.*, 247:69, 1964. 2. Griffith, R. S., and Black, H. R.: *Antibiotics & Chemotherapy*, 12:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: *Am. J. M. Sc.*, 239:198, 1965.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

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MEDICO-LEGAL SYMPOSIUM

(Continued from Page 1392)

tion of such scenes and incidents which so frequently occur in personal injury litigation, and was most helpful, I am sure, to many members of the medical profession in attendance at the Symposium who are called upon from time to time to testify and to give opinion evidence in such cases.

Third Session

"Compensation for Traumatic Neurosis"

A. "The Legal View." John L. Quinlan, Esq., New York City.

This speaker presented a very interesting discussion of the history and development of traumatic neurosis as a compensable condition. He pointed out that, while in the early days of our history there was little if any recognition of traumatic neurosis as being the basis for an award of compensation or damages, due in large measure to a lack of meaning or understanding of the term by the legal profession, the vast increase in the number of vehicles on our highways, with the consequent congestion and spiralling numbers of collisions and near collisions, coupled with the coming of the space age, has resulted in the Bar becoming more conscious of the nature and actual existence of the condition as a basis for recovery of damages; and, there has been a tremendous increase in recent years in the number of court decisions in which damages have been awarded for traumatic neurosis.

He pointed out that, while formerly in many jurisdictions, evidence of physical contact and trauma visible or demonstrable upon the person of the claimant was required as a pre-requisite for the allowance of a claim for traumatic neurosis, the trend in modern times has been to eliminate this requirement, and same has been abandoned in many states, and proof of physical impact is no longer required in more than 50% of the states in the Union in order to support a finding of traumatic neurosis and to award damages therefor. It was the speaker's opin-

ion that there is no justification for the rule requiring physical contact and trauma upon the body of the claimant as a pre-requisite to an award of damages for traumatic neurosis. He cited, as an illustration in support of his position, a case within his knowledge in which two men were working upon a scaffold high up over a street; one of the ropes holding the scaffold broke, and the claimant held on to the other rope and his life was saved, though he watched his friend fall to his death on the street far below. The claimant, though not physically injured in the fall of the scaffold, nevertheless was the victim of a severe and drastic neurosis, for which he was awarded substantial damages by the court.

The speaker concluded his discussion with the observation that a compensable claim for damages for traumatic neurosis is fully made out by credible evidence showing (1) a radical change in personal habits, demeanor and activities; (2) exposure to shock or trauma, even though there was no physical contact; and, (3) testimony of a doctor or psychiatrist that conditions are present demonstrating the presence of traumatic neurosis in the claimant.

B. "The Medical View." Herbert C. Modlin, M. D., Topeka, Kansas.

The speaker confirmed the fact that traumatic neurosis is a condition or illness, the existence of which is recognized by the medical profession; that in fact it was the medical profession which originated and first acknowledged its existence; and, that the legal profession adopted it as a basis for an award of damages, a cause of action. He acknowledged that psychiatry recognizes its existence and that, in his opinion, a diagnosis of same can be made with reasonable medical certainty, even though it results from shock or other traumatic experience unaccompanied by physical impact or injury. He stated that, while it is sometimes difficult to distinguish between neurosis and malinger, certain tests are available which can, with a reasonable degree of certainty, expose

the malingerer and confirm the genuine victim.

C. "Pre-Trial Consultation with Psychiatrists."

Psychiatric Experts: Leon Yochelson, M. D., for plaintiff, Washington, D. C.; Harold Stevens, M. D., for defendant, Washington, D. C.

Attorneys: Joseph Kelner, Esq., for plaintiff, New York City; Edward W. Kuhn, Esq., for defendant, Memphis, Tennessee.

This was an interesting and highly instructive dramatization demonstrating techniques in pre-trial consultations with psychiatrists, for both plaintiff and defendant, in a case involving traumatic neurosis. Each of the participants was a skilled and able expert in his field; and, the routine followed was an excellent demonstration of the pre-trial preparation of the witnesses, the psychiatrists, for direct and cross-examination upon the actual trial of the case.

Fourth Session

"Legal Therapy for Health-Care Problems"

A. "The 'Battered Child' Laws." John B. Reinhart, M. D., Pittsburgh, Pennsylvania, Departments of Psychiatry and Pediatrics, University of Pittsburgh School of Medicine.

The speaker presented a very interesting dissertation on the subject of the neglected and abused child. He traced the history of legislation on the subject, pointing out that legislation was enacted for the prevention of cruelty to animals before any legislative protection against abuse and cruelty to children was adopted. The first law enacted in the United States for the protection of children against neglect, abuse and cruelty was passed by the legislature of New York State in 1875; and, at this time there is only one state in the Union which does not have such laws. He commented on the fact that, while everyone recognized that children present problems to their parents, there is no justification for cruelty inflicted by the parent upon his or her child. He stated that, in one

of the large hospitals in an Eastern state, the number of cases of children under three years of age admitted to the hospital for treatment of injuries resulting from abuse and cruelty by their parents far exceeded the number of cases of children in the same age group admitted to that hospital for treatment of other serious medical problems.

The speaker emphasized that there must be a clear and compelling realization of the duty and obligation on the part of the doctor who finds a case of child abuse to report same to the appropriate agency or court, to the end that an investigation be made to ascertain and analyze the problem, and to adopt the necessary measures for the treatment or punishment, whichever may be appropriate, of the parents who abuse their children. Rehabilitation of such families, said the speaker, is frequently indicated and required. In some cases, complete separation of the child from the family is necessary; though this should be done only in rare instances when it is obvious that no other remedy would be effective. Where necessary, this should be done, but only after thorough and painstaking investigation is made and positive proof is found. There must be close and continuing communication and cooperation between the medical profession, the social agencies and the courts on this most vital problem, said the speaker, in concluding his remarks.

B. "Combatting Health - Care Frauds." Joseph A. Sabatier, Jr., M. D., Baton Rouge, Louisiana; member of A. M. A. Committee on Quackery.

The speaker opened his discussion with the observation that: "Quackery is one of the most virulent frauds known to our society."

He then proceeded with a detailed discussion of the menace which the practitioners of the art of chiropractic adjustment constitute to the public, stating that such quackery kills more people in the United States each year than die victims of crimes of violence. He stated that it was a cruel fraud

upon the public and should not be permitted. He further observed that the fact that chiropractic was licensed in forty-eight of the fifty states in the Union evidenced, not a recognition that it had a logical field of operation, but rather that it must be controlled in the public interest, and that licensing of same in said forty-eight states represented a sincere effort of the legislatures of those states to control the practice.

He stated that of the thirteen institutions teaching chiropractic in the United States today, not one of them was accredited or recognized by any governmental authority; and, he described the faculty of one of those thirteen institutions as consisting of twelve members, only one of whom had more than one college degree, that one having a B. S. and M. S. in engineering, and he was teaching pathology in the chiropractic school. He predicted that no calling which depended, as does the practice of the chiropractic art, upon the exhibition of ostentatious appearing equipment and other similar and equally fraudulent conduct could long survive, and that chiropractic is dying by its own hand in America.

He concluded his remarks by quoting a question and answer appearing in a book published by Palmer, one of the leaders in the field of chiropractic: Q. "What is the function of the human spine?" A. "To support the head, to support the ribs, and to support the chiropractor."

Medico-Legal Vignette

"Pima County Visited"

The last item on the program was a dramatization of a review and evaluation of a medical mal-practice claim by a panel of physicians and attorneys known as the Pima County Joint Malpractice Screening Panel. It seems that in Pima County, Arizona, a plan has been improvised for the preview and evaluation of medical malpractice cases, upon request of counsel for either side. The findings of the panel are not conclusive or binding upon the parties, but the evaluation

of the case by the disinterested panel usually influences and brings about the settlement of the cases short of litigation. The announced purpose of the plan is: (1) to foster a better relationship between doctors and lawyers; and, (2) to encourage disposition of such claims short of actual trial.

The panel conducting the dramatization consisted of Ian M. Chesser, M. D., John R. Schwartzmann, M. D., Robert O. Leshner, Esq., and Sidney Weissberger, Esq., all of Tucson, Arizona.

The method of procedure is as follows: counsel for either party may file the request for the hearing and evaluation of the claim and asks that a panel be selected, consisting of both doctors and lawyers; the petition for the panel is filed with the Office of the Medical Association, which assembles a panel, consisting usually of three doctors and three lawyers. A date is set for the hearing and notice is given to all interested parties. At the designated time and place, both plaintiff and defendant and their respective counsel are present. When convened, the plaintiff takes the stand and in an informal manner states the facts and circumstances constituting the basis of the claim. He or she may be examined by his or her counsel and cross-examined by the doctor's counsel. The defendant then takes the stand and relates the basis of his defense. He may, also, be examined by his counsel and cross-examined by plaintiff's counsel. Questions may be propounded to either of the parties or witnesses by any member of the panel of doctors and lawyers, or by the chairman, or counsel for the panel. Either party may present such other witnesses or evidence as he or she may care to submit.

After all the evidence is in, and the counsel have concluded their statements, the parties and their counsel retire, and the panel proceeds to consider the case.

The first issue to be decided by them is: "Is there a reasonable probability that the evidence presented shows negligence?" If this question is answered in the negative,

the parties are notified, and the hearing is concluded. If that inquiry is answered in the affirmative, the panel considers further the value of the case, i. e. the reasonable amount which the panel believes should be awarded to the plaintiff as damages. In that event the parties are notified of the findings of the panel, and the matter is thereupon concluded insofar as the panel is concerned. Neither party is bound by the findings and conclusions of the panel, but experience with the plan has shown that, when such review and evaluation of such cases have been held, a great majority of such cases are disposed of short of litigation.

While the plan has received the approbation of both the medical and legal professions in Pima County, Arizona, and other localities where it has been inaugurated, it is doubtful, in the writer's opinion, that such a plan would be justified in Alabama, for the very fortunate reason that the incidence of such type of cases is so small in our state there would be little occasion or opportunity for the use or application of such a plan.

Conclusion

The participants in the program were capable and prominent members of their respective professions.

The program was most interesting and instructive. It contained much information which would be of great value to every member of the medical profession. The writer has endeavored in this report to cover the salient points in each discussion; though, of course, a comprehensive coverage in this report was not possible. It was announced that copies of all the papers submitted would be ultimately available to those in attendance.

The writer is grateful for the privilege of attending the Symposium and is hopeful that this report will be of interest and of value to the members of the medical profession in Alabama who were unable to attend the Symposium.

Laboratory Movie Released By Public Health Service

A 35-minute movie in color, "Laboratory Design for Microbiological Safety," has been released by the Public Health Service for use by individuals and groups interested in the problem of protecting laboratory workers studying highly infectious materials.

The idea for the 16 mm film came from the National Cancer Institute, National Institute of Health, where concern has been high for the safety of scientists engaging in rapidly expanding studies of the Institute's Special Virus-Leukemia Program. Engineering principles involved in the design and construction of buildings which can safely house microbiological research are highlighted, and the concept of primary and secondary barriers in the containment of microorganisms is stressed in the film.

Personnel and equipment in laboratories of nine Federal and non-government institutions are featured. Dr. Arnold G. Wedum, Chief, Industrial Health and Safety Office, Fort Detrick, Maryland narrated the script which was co-authored by Dr. G. Briggs Phillips, PHS representative to the National Aeronautics and Space Administration; Robert Runkle, Biohazards and Containment Section, National Cancer Institute; and Derwood R. Thayer, Audiovisual Branch, PHS Communicable Disease Center.

The film (CDC Number M-1091) is available on loan from the Communicable Disease Center Library, Atlanta, Georgia and the Biohazards and Containment Section, National Cancer Institute, Bethesda, Maryland.

Government agencies and related organizations such as grantees may purchase copies of the film from the PHS Audiovisual Facility in Atlanta. Other interested groups or individuals should communicate with DuArt Film Laboratories, 245 W. 55th St., New York, N. Y. 10019, in regard to purchasing copies.

Citizenship, Citizens and Circumstance

Neal S. Flowers, M. D.

I have promised Dr. Hannon to speak less than 15 minutes. I believe I can give him about 2 minutes change.

Don't look at your watch, that's an editorial statement. It is like the editorial use of "we" for a single person. Mark Twain said that an editorial "we" should only be used by heads of State, newspaper editors, and people who have tapeworm. I shall not use this "we" because I am afraid I don't belong to the first two categories and I am proud that I am not in the last one.

Mr. King, Dr. Hannon; other honored guests; ladies and gentlemen:

I shall not waste this precious time with the cliches of a bony mind concerning citizenship.

I would rather dare you to think and to discern the foremost circumstance of citizenship and citizens.

Mr. Webster defined circumstance as "something existing or occurring in connection with or relation to some other fact or event, modifying or throwing light upon the principal matter."

This could be the shortest address on record because one word personifies this circumstance—responsibility!

Ah, but the center-point is responsibility to whom, or to what.

Let us be involved in the direction of your responsibility to yourself. Someone has called it *rational* self interest, or *individual* responsibility.

Editor's note: The above is a speech given by Dr. Neal S. Flowers of Mobile at the "Mobilian of the Year" banquet, sponsored by the Civitan Club of Mobile, January 11, 1967. Dr. W. C. Hannon, Mobile, was selected as Mobilian of the Year.

A current Christmas issue of a medical journal carries on its cover a "Prayer of the Physician." I read with horror the last line:

"... When at death I lay down my task I shall go to what judgement awaits me strong in the consciousness that I have done something towards alleviating the *incurable tragedy* of Life."

"The incurable tragedy of life!"

Is life a tragedy? In this free country of prosperity has a man, whose profession admittedly smacks of the priesthood and the barbershop, de-evolutionized to the status that life is tragic? Are its tragedies incurable? This is a prayer?

Perhaps the writer mis-spoke himself and if so I am glad, because I would be left without a speech!

Or maybe that's what he meant to say—or maybe he's right—for him!

Is he the ghost of mankind destroying itself? Why?

Have we become so intertwined with the faceless, nameless crowd around us that the individual no longer counts for anything? That his singular life is a tragedy—a sacrifice on a pagan altar?

I think not!

Shakespeare said it best:

"This above all—to thine ownself be true, and it must follow, as the night the day, thou canst not then be false to any man."

So the thesis of individual responsibility shouts to us from Hamlet.

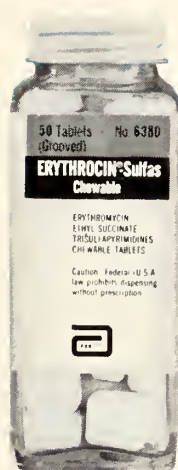
Individual Responsibility first of all rejects mass morality—mass guilt—mass punishment. From Dachau to Dallas, the cult of

(Continued on Page 1406)



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

1. Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
2. Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



ERYTHROCIN-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief
Summary
on next
page

ERYTHROCIN[®]-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.



701358

CITIZENSHIP, CITIZENS AND CIRCUMSTANCES

(Continued from Page 1403)

moral relativity still lives and fearfully gains momentum. It is a creed of denial of personal fault. A denial to be judged and punished for one's own individual crimes. It is the result of constant irrational tolerance toward Lucifer and constant intolerance toward the sacred, unrepealable laws of nature propounded by God.

Its commandments go like this:

Thou shalt have no other Gods before me—except money.

Thou shalt not steal—much.

Thou shalt not commit adultery—unless you're in love.

Thou shalt not do murder—except on your own conscience.

Honor thy father and thy mother—by making them wards of the state.

This is the philosophy which condemned whole generations of people, 9,000,000 of them, to the ovens of places like Dachau for supposed crimes against the State. It is the same philosophy which condemns a whole city, Dallas, for the death of a young president. It is the same philosophy which allows Mr. Manchester in his controversial book to say that Lee Harvey Oswald was a victim. A victim of what? Of whom? He was a victim of his own wrong-doing, simply and individually.

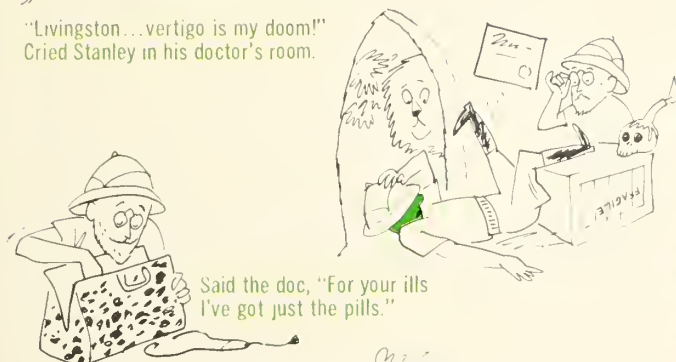
The belief in a personal God and a collective morality is as schizophrenic as the assigning of the individual qualities of good or evil to whole nations of people. It is an intellectual limp developed by our groupy friends which requires them to speak of humanity in mass as an abstraction of the race in its entirety.

"The common good," for "good of the community," are principles of this creed. To ac-

(Continued on Page 1411)



"Livingston... vertigo is my doom!"
Cried Stanley in his doctor's room.



Said the doc, "For your ills
I've got just the pills."

Said Stan,
"Antivert, I presume."



Antivert^{tablets/syrup} stops vertigo (meclizine HCl, niacin)

Tablets: (meclizine HCl 12.5 mg. and niacin 50 mg.) Syrup: (each 5 cc. teaspoonful contains meclizine HCl 6.25 mg. and niacin 25 mg.)

Most widely prescribed anti-vertigo agent! Complete to moderate relief of symptoms in 9 out of 10 patients²

Antivert, the leading anti-vertigo product,¹ combines meclizine HCl, an outstanding drug for treatment of vestibular dysfunction, with niacin, a drug of choice for prompt vasodilation. Prescribe Antivert for your patients with vertigo, Meniere's syndrome and allied disorders.

Precautions and contraindications: Frequent, short-lived reactions include: cutaneous flushing, sensations of warmth, tingling and itching, burning of skin, increased gastrointestinal motility, and sebaceous gland activity. In explaining these reactions to the patient, it is suggested that they be regarded as a desirable physiological sign that the niacin is carrying out its intended function of vasodilation. Because of this vasodilation, severe hypotension and hemorrhage are obvious contraindications to Antivert therapy. Although the incidence of drowsiness and other atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when en-

gaging in activities where alertness is mandatory. **Use in women of childbearing age:** A review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum. **Dosage:** One tablet or one to two teaspoonfuls (5-10 cc.) t.i.d. just before meals. Specific requirements for individual patients should be determined by the physician. **Supplied:** Tablets in bottles of 100 and 500. Syrup in pint bottles. RX only.

References: 1. Based on 1966 data from independent physicians' market survey organization. 2. Scal, J. C.: Eye Ear Nose & Throat Month. 38:738 (Sept.) 1959.

Neobon[®] geriatric supplement helps keep them 'on the go'

Each capsule contains:

(1) Vitamins and Minerals	
Vitamin A (acetate)	2000 U.S.P. units
Vitamin O (ergocalciferol, U.S.P.)	200 U.S.P. units
Vitamin B ₁ (thiamine mononitrate, U.S.P.)	0.5 mg.
Vitamin B ₂ (riboflavin, U.S.P.)	0.5 mg.
Vitamin B ₆ (pyridoxine HCl, U.S.P.)	0.5 mg.
Niacinamide, U.S.P.	50 mg.
Calcium pantothenate, U.S.P.	5 mg.
Vitamin E (di-alpha tocopheryl acetate)	5 I.U.
Rutin	5 mg.
Cobalt (from cobalt sulfate)	0.033 mg.
Molybdenum (from sodium molybdate)	0.066 mg.
Copper (from copper sulfate)	0.33 mg.
Manganese (from manganese sulfate)	0.33 mg.
Magnesium (from magnesium sulfate)	2 mg.
Iodine (from potassium iodide)	0.05 mg.
Potassium (from potassium sulfate)	1.66 mg.
Zinc (from zinc sulfate)	0.4 mg.
(2) Hematopoietic Factors	
Iron (from ferrous sulfate)	3.40 mg.
Vitamin B ₁₂ (cobalamin concentrate, N.F., as Tablets [®])	1 mcg.
Vitamin C (ascorbic acid, U.S.P.)	50 mg.
(3) Digestive Enzyme	
Pancreatic substance	50 mg.
(4) Gonadal Hormones	
Methyltestosterone, N.F.	1.0 mg.
Ethinyl Estradiol, U.S.P.	0.006 mg.
(5) Amino Acids	
L-lysine (monohydrochloride)	50 mg.
L-Glutamic acid	30 mg.

[®]Enzymatically active defatted material obtained from 250 mg. of whole fresh pancreas.

For older adults who require it, daily supplementation with Neobon can help overcome decreases in endogenous gonadal hormone production, as well as deficiencies of iron, vitamins and other nutritional factors. In a single convenient capsule, Neobon provides vitamins, minerals, gonadal hormones, hematopoietic factors, digestive enzymes, and amino acids—all selected for adjunctive therapeutic value in the geriatric syndrome. For example, one of the gonadal hormones in Neobon is ethinyl estradiol. It is more slowly metabolized in the body than natural estrogens or their esters.

Precautions: Contraindicated in patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast or prostate.

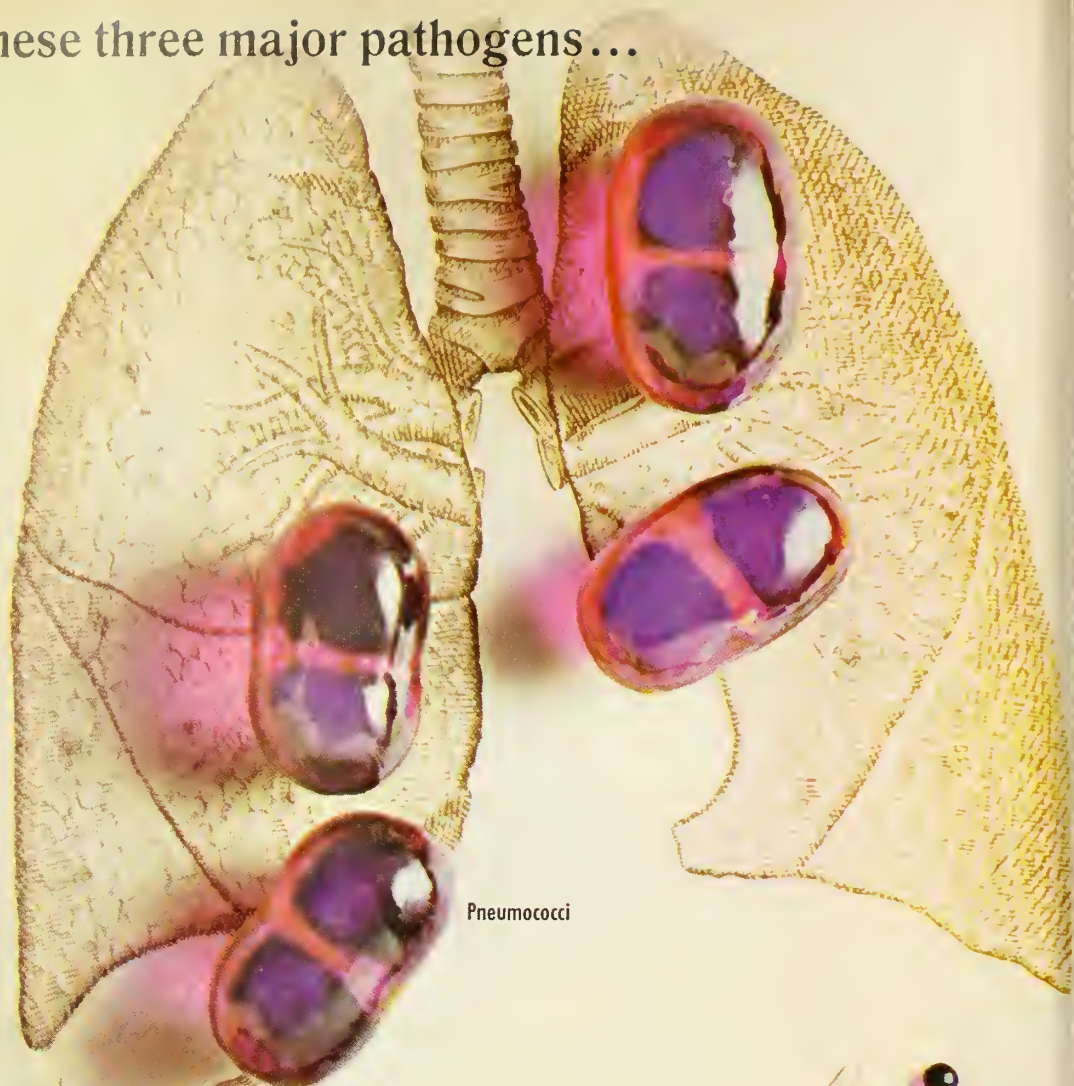
Dosage: One capsule, t.i.d. with meals, or as directed by physician.

Supplied: Bottles of 60 capsules. RX only.



**J. B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
NEW YORK, N.Y. 10017**

Against these three major pathogens...



Pneumococci

Penicillin-Sensitive
Staphylococci



Beta-Hemolytic
Streptococci



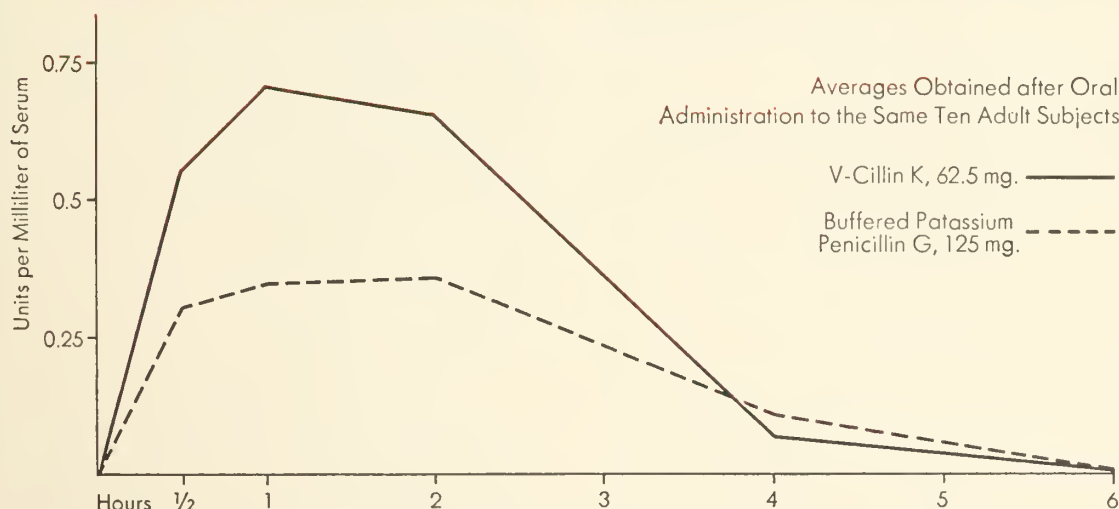
V-Cillin K[®] provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive)		Streptococcus, Group A		Diplococcus Pneumoniae	
	MIC (mcg./ml.)		MIC (mcg./ml.)		MIC (mcg./ml.)	
	Median	Range	Median	Range	Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Claxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food

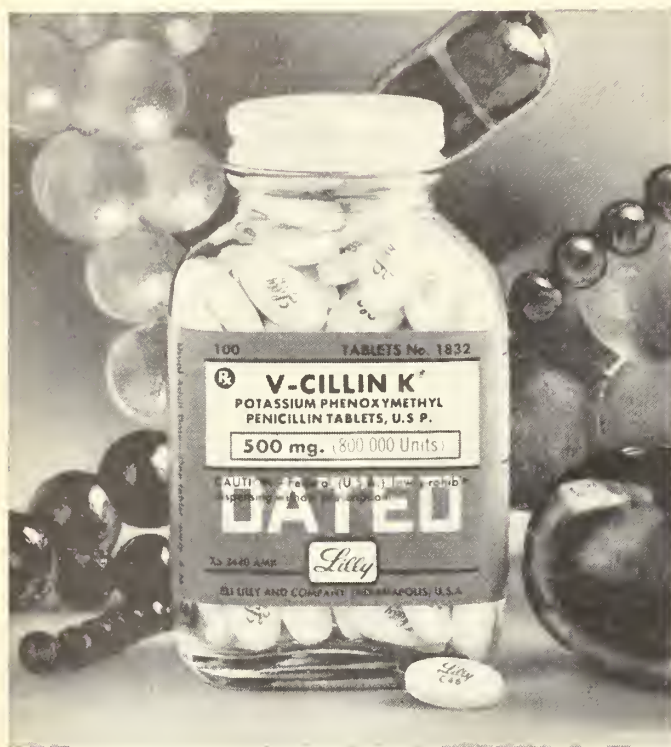


Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K[®]  700636
Potassium Phenoxyethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxy-methyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxyethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic

manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects but are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, or extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) in bottles of 50 and 100, and 250 mg. (400,000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) in 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [011867]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

CITIZENSHIP, CITIZENS AND CIRCUMSTANCES

(Continued from Page 1406)

cept the theory of "common good" is to admit that the welfare of some individuals must be subservient to the welfare of others; some must lose their rights for the "good" of others. The crux of the matter is who selects the people belonging to these two groups. Are they selected by the social planners, the voice of the mob, or by natural voluntary processes? I hold that any government that subverts the rights and privileges of one group to the advantage of another is guilty of tyranny. And so, only individuals exist, and not the antiquated failure of tribal custom called "common good."

As you know, the Medical Society is now directly involved in defending this principle of individual choice (and parenthetically we need your help).

Individual responsibility requires self discipline. There is no alley of retreat in the face of adversity, popular now as undue criticism and harassment.

It requires the abandonment of the gray morality, the golden mean of Aristotle. Ethically, to admit that an issue is gray is to admit that you can distinguish between black and white—the evil and the good. If such distinction is so clear, where is the logical excuse to reject the good for something less than good?

Do not expect credit for this virtue. Expect only demands for more sacrifice, more compromise and more negotiation which will decay the individual by his unwarranted admissions of guilt inspiring further blackmail pressures. This is called sanction of the victim. The vandal enslaves you because you abdicate your personal freedom, not because you have fallen before a superior force or a superior intellect, but because you refuse to use your reason to combat inferior motives.

You have willingly surrendered your valuables to the burglar before he even brandishes the gun. You have made the further mistake of assuming that he has a gun and that it is loaded.

Self discipline is required to fairly evaluate your own worth and to ask nothing more of life than that which you earn.

Self esteem is intrinsically a part of individual responsibility. We hear much today about the word "image." What is "image?" Is it self esteem or prestige? Self esteem is an earned inherent value which cannot be destroyed at the whim or desire of anyone and can only be destroyed by an individual's loss of his own convictions or values. Prestige is that quality which others attribute to you. It is not earned by a man's own standards, but bestowed upon you by someone else using their standard as a guide. It is subject to outside permissiveness. It is determined by the ravings of one mob who at the moment has a louder voice than another mob. It is subject to irrational and whimsical withdrawal without notice. If this is image, what is it worth? Image is no substitute for the self esteem of individual responsibility.

Individual responsibility condemns *self sacrifice*. A sacrifice is not the surrender of something of less value for something of greater value, that is a bargain! Sacrifice is a gyp; the exchange of superlative goods for an inferior, shoddy product. Does a mother who buys milk for her baby instead of a new hat sacrifice, or has she by a standard of proper values made a bargain? Sacrifice does not belong in today's vocabulary of capitalism and free enterprise. It is a deceitful term of collectivism.

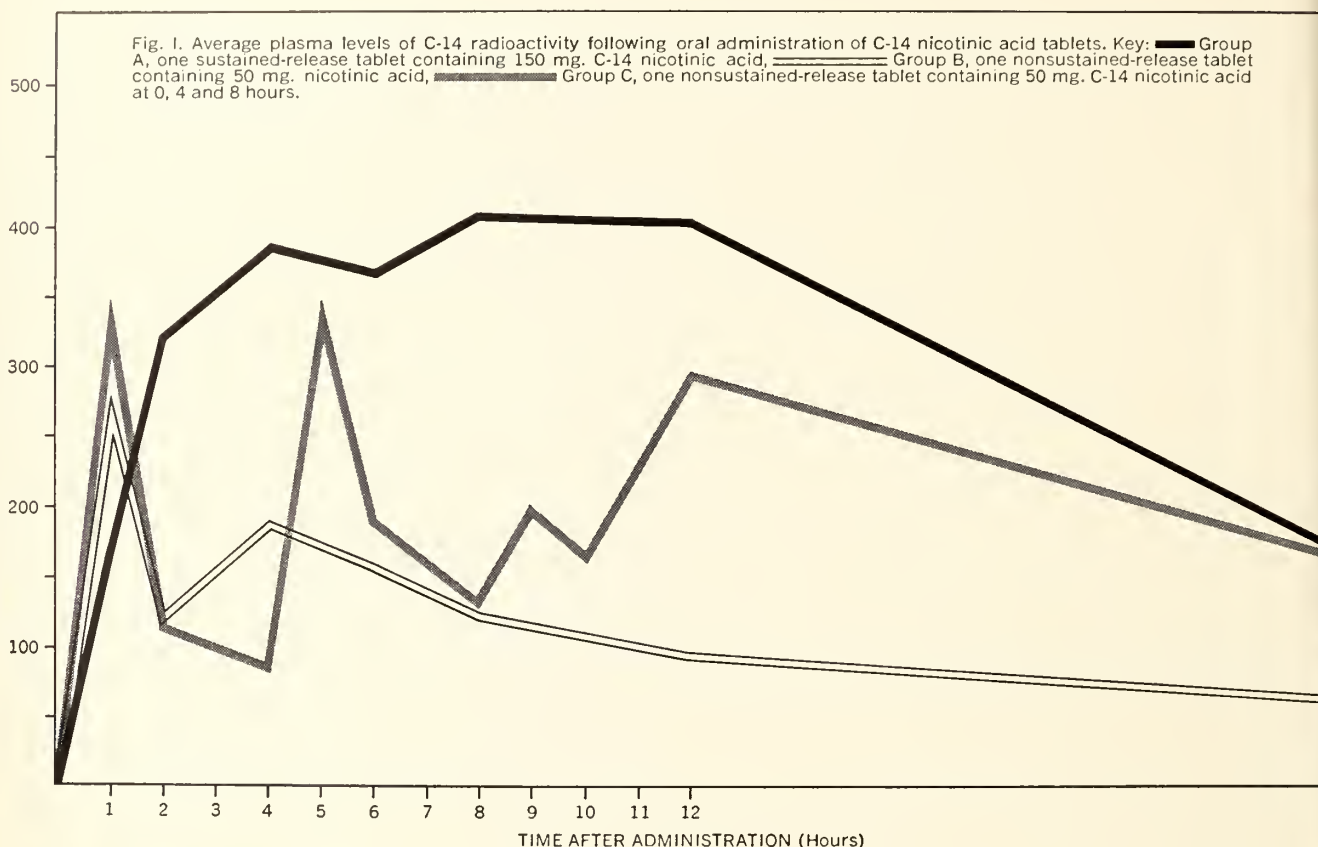
Self sacrifice is moral suicide. To sacrifice on the altar of altruism is to throw your pearls before swine. It consumes your soul by converting all mankind into a looting group of hateful gangsters. Then *you* are

(Continued on Page 1414)

Sustained circulatory, respiratory and cerebral stimulation for the

Fig. 1. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

C-14 AS MICROGRAMS NICOTINIC ACID PER LITER OF PLASMA



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

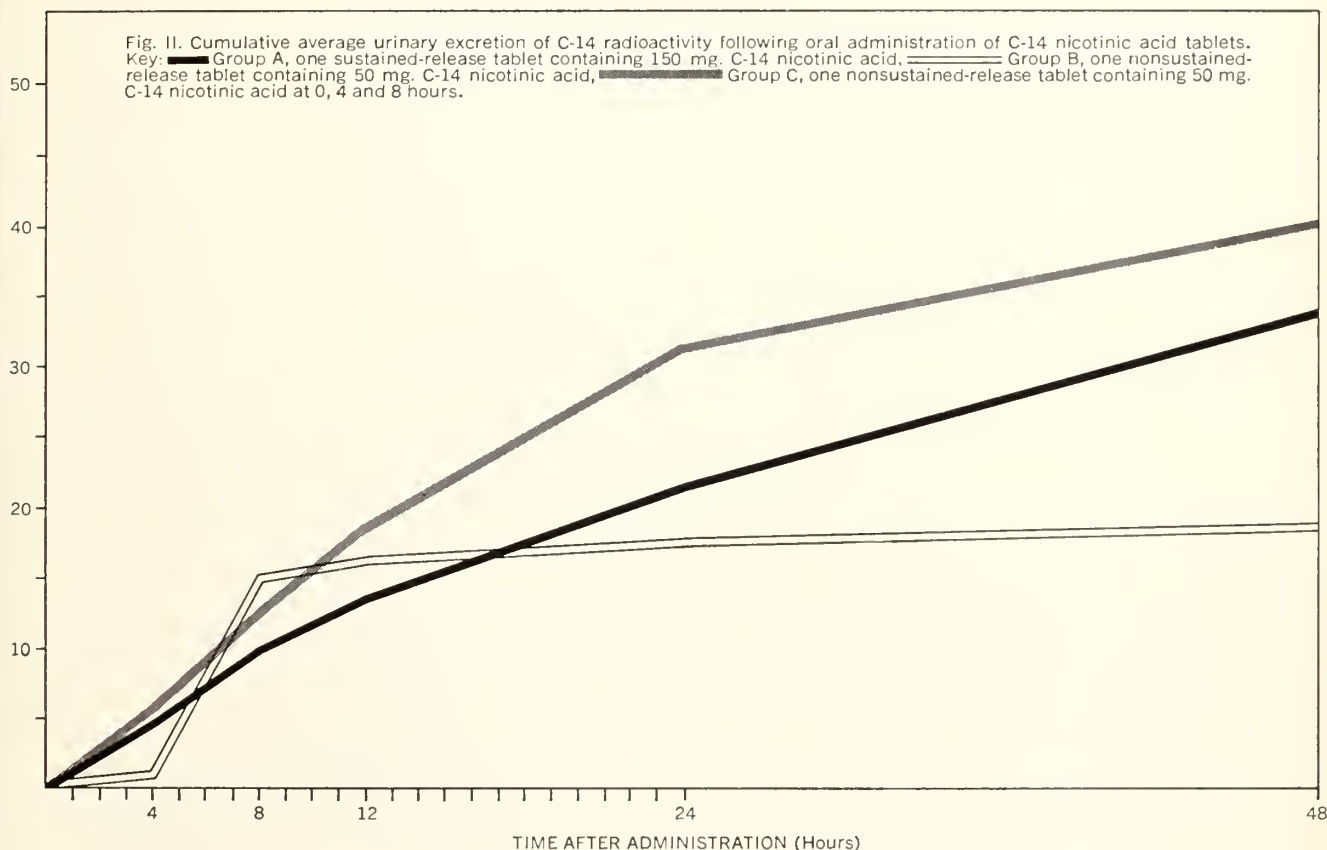
mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also, cerebrovascular circulation is complemented by pentylentetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate, signs of senile confusion. Patients become more alert,

aged and debilitated

C-14 AS MILLIGRAMS NICOTINIC ACID EXCRETED



less confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylentetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.



"First with the Retro-Steroids"

PHILIPS ROXANE LABORATORIES

Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylentetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

CITIZENSHIP, CITIZENS AND CIRCUMSTANCES

(Continued from Page 1411)

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Other qualities of individual responsibility such as self determination, rational choice, security, mental health and peace indescribable and perfect, I shall leave for you to work out.

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Remember it is promised:

"They shall mount up with wings as eagles; they shall run, and not be weary, and they shall walk, and not faint." (Isaiah 41:31)

Display proud confidence in your individual worth, and be sure that you earn it.

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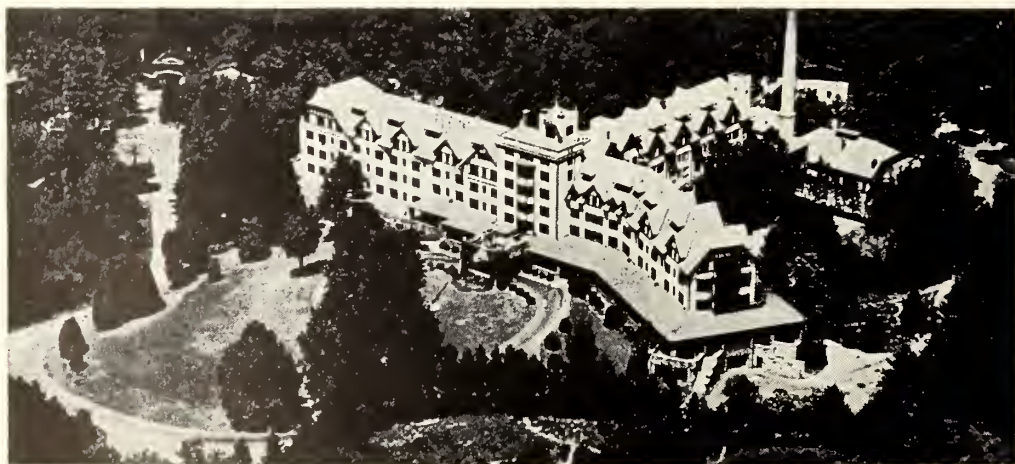
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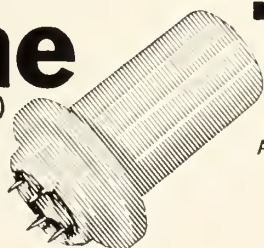
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From the Washington Office
American Medical Association

Washington, D. C. — The American Medical Association favors utilizing medicaid instead of expanding medicare.

Dr. Charles Hudson, AMA president, outlined the Association's position at a House Ways & Means Committee hearing on the Administration's bill "Social Security Amendments of 1967" (H. R. 5710). He was accompanied by Dr. Milford O. Rouse, AMA president-elect.

"Available tax funds should be used to give maximum health care to those who need help," Dr. Hudson said. "Expenditure of public funds on those who do not need help limits the resources available to those who do need it. . . ."

"We believe that a properly administered Title 19 (medicaid) with realistic criteria of eligibility designed for economically disadvantaged persons, plus the encouragement and improvement of voluntary health insurance and prepayment plans for the solvent, provide the best approach to health care financing."

Dr. Hudson said AMA representatives would be glad to meet with the committee and other interested parties to hammer out a workable approach to solving the many complex problems in the medicare program, particularly as concerns its Plan B.

"Unfortunately, Part B did not receive an

amount of public or congressional debate warranted by the nature and scope of the proposal," he said. "This committee is now confronted with many problems inherent in the vast undertaking of the federal government in becoming directly involved in the total health care of almost 20 million persons."

"We believe it is possible for the Congress, the medical profession and others interested in the subject to develop a new mechanism for delivering medical care to people over 65 that would be more consistent with existing private sector mechanisms. . . ."

Dr. Hudson said that carriers, physicians, patients, and the government all are dissatisfied for various reasons with Part B. He said one possible solution might be to substitute for the Part B program a subsidy to all eligible persons for the purchase of private insurance.

Highlights of AMA's testimony included:

Section 125, to include the disabled.

The adoption of Section 125 . . . could change the direction of medicare from a program for older persons to one aimed at various select categories . . . We believe Title 19 should be utilized for that purpose.

We urge the Committee to reject this provision.

Section 127, including podiatry.

While recognizing the usefulness of podiatry services, we are impelled to note that if the amendment is adopted, the podiatrist could assume responsibility for the care of some of the more difficult problems in medicine. We believe this to be unsound.

Section 130, creation of Part C of Title 18.

This section would provide a new Part C to cover payment for hospital services rendered to hospital outpatients; and for diagnostic specialty services to both outpatients and inpatients of hospitals.

The AMA opposes Part C *in toto* . . .

Section 131, physician certification.

The AMA endorses Section 131 which would remove the requirement of a physician's certification for inpatient hospital care for each Medicare patient admitted to a general hospital. We urge the Committee to consider this amendment favorably and remove an unnecessary impediment to the operation of Part A.

We further urge that the requirement for re-certification be similarly deleted, since this need should be satisfied as a result of the work of utilization review committees.

Until re-certification is deleted, we suggest that the first certification date be the 20th day of hospitalization, as permitted in the existing law.

Section 220, income maximum under Title 19.

The AMA supports the concept of limiting eligibility for Title 19 benefits to persons who genuinely need financial assistance in meeting their health care needs.

Section 226, free choice under Title 19.

Although free choice is guaranteed for Title 18 recipients, a similar privilege was not extended to Title 19 beneficiaries. We believe this was an oversight, and we heartily support this perfecting amendment to Title 19.

Additional amendments proposed by the AMA.

First, the AMA recommends that Title 18 be amended to permit payment of charges for professional services on the basis of a physician's itemized statement of charges rather than a receipted bill.

Second, we recommend that Title 18 be amended to remove the requirement for three days of hospitalization before qualifying for extended care benefits.

In addition, we offer a recommendation relating to psychiatric care under Title 18.

Regarding Title 19, we offer six amendments.

First, that the program permit payment to the patient for services rendered to him by a physician on the basis of the physician's itemized statement of charges.

Second, that the program clearly provide for the payment of physician fees on the basis of his usual and customary charges, using the same approach as that applied under Title 18.

Third, that Title 19 encourage the use of insurance carriers in the implementation of state programs.

Fourth, that in the implementation of Title 19 programs, there be no requirement for certification or re-certification.

Fifth, that Title 19 permit all state plans to vary the eligibility standards within a state to recognize the very real differences in the cost of living in a rural area, a small town, a city or a metropolitan area.

Our sixth recommendation relates to the fact that Title 19 benefits differ for mentally ill patients depending on whether they are above or below age 65. We believe there should be no distinction in the services available to mentally ill patients.

Physician coverage under Social Security.

We believe that physicians, having been brought under Social Security coverage, should be accorded the same privilege and opportunity for reaching a fully insured status as was accorded other professional groups when they were included in the program.

Accordingly, we urge this Committee to consider the adoption for physicians of an "alternative insured status" similar to that permitted by the amendments of 1954 and 1956 which brought into the program many new groups of people and professional self-employed persons, including lawyers.

Pro Team Physician Describes Athletes' Peculiarities

Before a game, a professional football player swallows half a jar of honey in his hotel room. By half-time his stomach has had enough, and up comes the honey. Nevertheless, the man repeats the process the next game, because carbohydrates are considered a quick source of energy.

Another player eats three steaks before the game, because protein makes a man stronger. There is no evidence that this is so, but it would be hard to convince him of this.

Dr. James A. Nicholas, orthopedic surgeon to the New York Jets football team, told the 5th Postgraduate Conference on the Medical Aspect of Sports that professional football players are not alone in having such idiosyncrasies. Peculiar attitudes, unfounded assumptions and superstitions crop up in all sports, in college and high school athletes, in coaches and trainers and in team physicians themselves. These sometimes arise out of a player's allegiance to a father, coach or trainer who passes on something he was taught twenty years before.

Exercise Rituals Dangerous

Dr. Nicholas said some players have exercise rituals that are not only useless but may actually cause damage. He has seen ruptured discs and cartilages "torn in front of my eyes" by athletes doing improper calisthenics. One man damaged his cruciate ligament while doing pivoting toe touches. Such accidents happen through the misconception that every athlete will benefit from the same sort of exercise. Nothing could be less true, said Dr. Nicholas, who points out that "... some of us are loose, some of us are tight." The loose-jointed man requires one kind of building-up to prevent damage to his joints, while the other type must watch out for muscle pulls.

According to Dr. Nicholas, no sound study has been made of why some men are hurt and some not. "How many of you," he asked the

audience, "have taken your 40 or 50 boys and broken them down into the tight ones, loose ones, strong ones? You do it subjectively by performance. This is wrong."

Coaches and trainers should recognize two principles in planning conditioning exercises: first, the greater the force required to hurt a joint, the less apt it is to be hurt. Weight lifting is good for strengthening muscles to brace a joint. Special attention should be given to developing the anti-gravity muscles which are not stressed in the usual activities. Secondly, a muscle developed in weight lifting also tends to tighten and shorten. To counteract this, stretching is required.

Swimming Stretches, Builds Muscles

Swimming, a subject of misconception in many minds, offers an excellent way to stretch muscles. Dr. Nicholas said it is an absolute fallacy that swimming softens them. The sport enlarges certain muscle groups, and active resistive exercising in water are effective strength builders. A sore-legged quarterback can gain useful thigh strength through sideways goose-stepping exercises underwater, Dr. Nicholas said.

The Jets players are encouraged to swim at the Peekskill (N. Y.) summer training camp. They use a heel-to-buttocks exercise in the pool to stretch and prevent thigh pull, and instead of the usual toe-touch, contraindicated with tight hamstrings, a ballet-like exercise of placing one foot on the pool side and dipping on the other is used.

Taping is another idiosyncrasy in sports, Dr. Nicholas said. Weak ankles should certainly be taped, but it is wrong to tape all ankles indiscriminately. Mickey Mantle's knees are subject to injury because he has suffered ruptures of cruciate and collateral ligaments. Joe Namath had a cruciate ligament removed. Taping these athlete's ankles

would be "the worst thing in the world," Dr. Nicholas said, because as they land on the rigidly supported ankle the force is transmitted directly to the knee.

"Performance Aids" Scored

Ergogenic aids, substances theoretically producing superior athletic performance, are another common fetish. Dr. Nicholas said hard work is the only thing that will do that. Inhalation of oxygen, for instance, does not help a tired player, but since it is harmless, it is made available to Jets players who believe in it. Vitamins, folic acid and "blood builders" are useless to an athlete on a properly balanced diet. Dr. Nicholas added, however, that vitamins may be indicated for the player burning up 5,000 to 6,000 calories in violent two-a-day workouts. Amphetamines

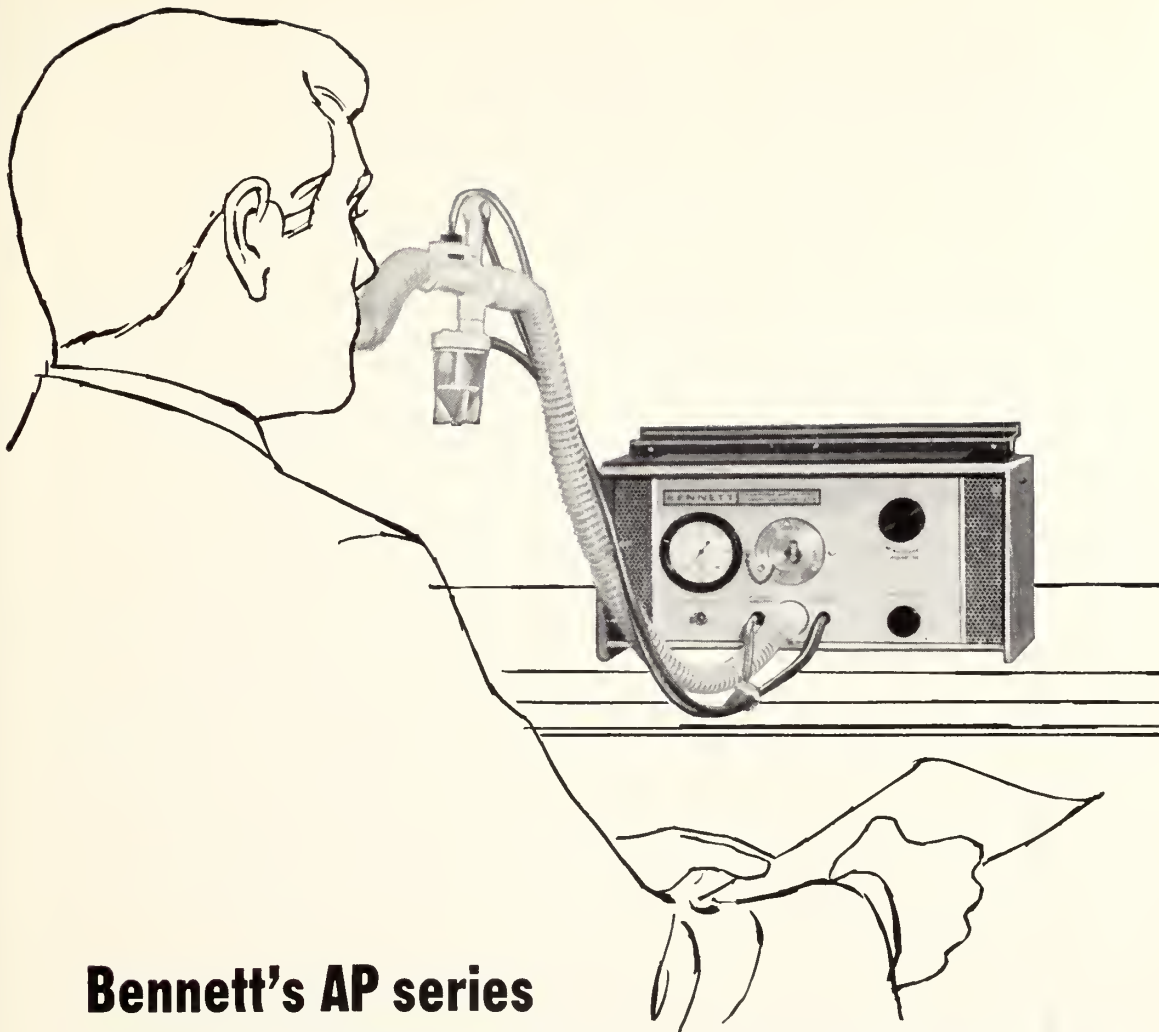
can raise blood pressure in potential hypertensives and should not be used, but "simulated yellow pills" or placebos may have some psychological value.

An idiosyncrasy peculiar to the professional athlete, Dr. Nicholas said, is the idea that six weeks a year in training camp will get him in shape. This is particularly wrong for the older pro who gains weight on an off-season job or on the banquet circuit. Stretching tight muscles for six weeks a year is not enough to prevent injury, either. Tightness in calf, anterior thigh or hamstring muscles puts a dangerous load on the joints. Every athlete should make training a year-round proposition, Dr. Nicholas said, and this means proper exercise, not just a program of running.

INDEX TO ADVERTISERS

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Aetna Life & Casualty	1299
Alabama Soft Drink Assn.	1295
Ames Company	1306, 1307
Appalachian Hall	1414
Ayerst Laboratories	1358, 1359
Bristol Laboratories	1296, 1297
Burroughs Wellcome	1304
Dorsey Laboratories	1313, 1314, 1315, 1316
Durr Surgical Supply Co.	3rd Cover
Geigy Pharmaceuticals ...	1301, 1354, 1355, 1356, 1392, 1393
Highland Hospital	1335
Hill Crest Hospital	1320
Hynson, Westcott & Dunning, Inc.	1291
Lederle Laboratories	1302, 1303, 1325, 1349, 1415
Eli Lilly & Company ...	1st Cover, 1336, 1366, 1367, 1396, 1397, 1398, 1408, 1409, 1410

William S. Merrell Company	1362, 1363
Parke Davis & Company, Inc.	2nd Cover
Parkwood Hospital	1319
Peachtree Hospital	1360
Phillips Roxane Laboratories	1412, 1413
Pitman-Moore	1369
Wm. P. Poythress & Company	1324
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Roche Laboratories	4th Cover, 1350, 1351, 1372, 1373
J. B. Roerig	1407
Wm. H. Rorer, Inc.	1311, 1328, 1329
Sandoz	1394, 1395
Searle	1352, 1353
The Stuart Company	1416
Syntex Laboratories	1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386
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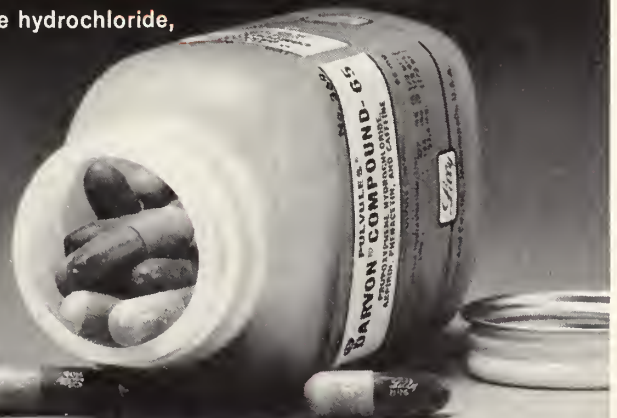
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Volume 36 • June, 1967 • No. 12

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Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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CONTENTS

President's Page	1424
The Woman's Auxiliary	1426
Editorial Comment	1430
The Mantle Rests On New Shoulders	1430
Traffic Safety:	
A Physician's Concern	1435
Liberal Abortion Laws Favored	1436
Around the State	1437
Dr. J. O. Finney Joins Faculty of University of Alabama Medical Center	1437
1967 Officers of County Medical Societies	1440
Medical College Receives AMA-ERF Gift	1443
Vital Statistics	1446
Pictorial Review	1456
County Health Officers and Administrators	1460
Physician Placement Service in Alabama	1462
Scientific Section	1467
Clinical Oxygen and Patient Relationship, Donald S. Tysinger, Jr., M. D., Dothan	1467
Physical Aspects of Aging, J. J. Kirschfeld, M. D., Montgomery	1473
Association Forum	1487
Resist Bureaucratic Control—Governor Wallace Urges	1487
Alabama Department of Public Health	1494
Field Testing Program For Carbon Monoxide, John D. Rayfield, M. D., Sylacauga	1494
Social Insurance in Britain and Sweden	1504
Abortion: The Doctor's Dilemma	1507
Index to Volume 36	1520
The Month in Washington	1523
AMA Archives-Library	1536
Man's Cold War With Insects	1538
Dr. Clark Describes Research	1541

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President's Page

In recent weeks more conversation and correspondence has been generated by the proposed changes the AMA Board of Trustees plans to make in its Group Disability Insurance Program than any subject this writer can recall. This even applies to Medicare!

In 1962, the AMA developed a Group Disability Insurance Program that was available to its members. It seemed to have quite adequate benefits and reasonable premiums and was even available to members 70 years of age or over, so long as they stayed in active practice.

After the program was in effect some two years or so, the current carrier indicated that it was actuarially unsound and requested revisions. However, this was not granted by the AMA because of the existing five-year contract. The existing contract expires on September 1, 1967.

In an effort to develop a new or continuing program for September, 1967, this matter was again officially considered by the Board of Trustees and the House of Delegates at the Clinical Convention in Las Vegas in November, 1966. It received considerable attention and discussion; sometimes quite heated. Briefly, the House of Delegates recommended that, if possible, the same benefit structure, coverage and same premiums be continued. Another carrier made an offer which was good for only a week. They offered to carry the existing program with the same benefits, premiums and coverage for a five-year period ending in 1972. However, we feel they were in error about the short period of time it was



Dr. E. Bryce Robinson, Jr.

proposed. Since then, the offer has been extended to July 1, 1967.

At this time there are some 40,000 subscribers to this plan. The revisions suggested in the existing program would eliminate physicians 70 years of age and over and seems to reduce certain benefits to certain ones and at the same time the premiums will be increased. The AMA Board of Trustees, through its Disability Insurance Advisory Committee, still maintains that the present program is actuarially unsound. To date, this writer has seen nothing that convinces him that this premise is valid.

Based on information available at this time, we will support the alternate proposal with a new carrier with the same benefits, premiums and coverage.

We understand that this matter will again

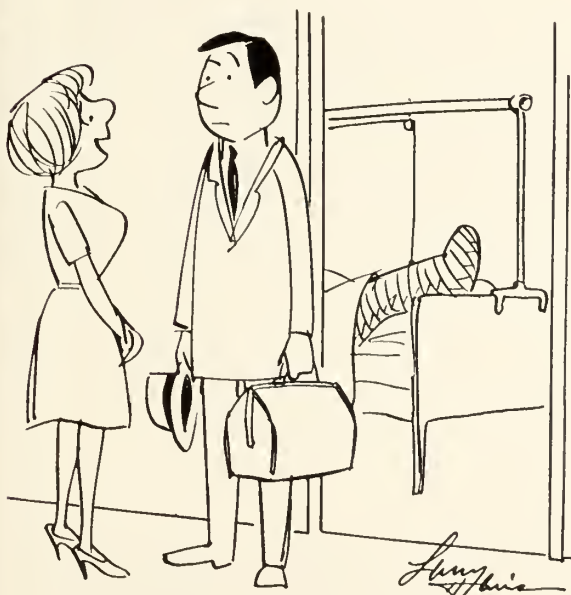
PRESIDENT'S PAGE

receive consideration at the annual convention of the American Medical Association in Atlantic City June 18-22, 1967. A special Reference Committee of the House of Delegates has been appointed for this purpose. All of you who have an interest in this matter are urged to attend the meeting in Atlantic City and you will have an opportunity to be heard by members of the Reference Committee so that their final report and/or recommendations will embody the thinking of the majority of a large number of people who testify before it.

Sincerely yours,



E. Bryce Robinson, Jr., M. D., President
The Medical Association of the
State of Alabama



"What's taking so long, Doctor? The repair shop sent his car home weeks ago."

Reprinted from **Nebraska Medical Journal**

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- CHRONIC BRONCHITIS
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*The
fast-disintegrating
uncoated tablet
gives relief in
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Each tablet contains:

Potassium Iodide.....195 mg.
Aminophylline.....130 mg.
Phenobarbital, Caution: May be habit forming... 21 mg.
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Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

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Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

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The Woman's Auxiliary

During the past year the Woman's Auxiliary, under the capable leadership of Mrs. Ira B. Patton, Jr., has achieved many outstanding accomplishments.

Membership of the Auxiliary has grown to 1,362 members. Two new counties, Lawrence and Hale, were organized. This brings to 35 the number of organized component Auxiliaries.

Through untiring effort and fund raising projects the Auxiliary was able to raise \$13,976.83 for the American Medical Association Education Research Foundation, an increase of \$4,000 over last year. This gift was presented to Dr. S. Richardson Hill, Jr., Dean of the University of Alabama Medical College, to be used as he may deem necessary. Mrs. B. H. Johnson, Jr., of Bessemer, served as the chairman of this committee.

Under the direction of Mrs. Gene Qualls, of Sheffield, Chairman of Health Careers, more than ten thousand students have been reached this year through the Health Careers Programs in the junior and senior high schools of our state. Scholarships and loans were awarded in the amount of \$13,325. Six thousand dollars of this was used for paramedical education.

International Health Activities is the Auxiliary's philanthropy of service. This year 1,258 pounds of sample drugs and 310 surgical supplies were sent to World Medical Relief. These supplies will be used by American doctors who have given up a rewarding medical practice at home and serve, for nearly nothing, in remote areas of the world to bring hope and life to people who otherwise would live and die having never seen a doctor or even a pill. This program was under the direction of Mrs. J. O. Brooks of Hamilton.



Mrs. James C. Guin, Jr.

The accomplishment of the past administration has presented a challenge to those who follow. The new administration will meet this challenge by determining to ourselves that we can carry the responsibilities that face us, and in so doing, assure ourselves of reaching any goal.

The projects of the Auxiliary are, of course, important, but each member is more important, because every member has something to contribute. We extend an invitation to all doctors' wives in the State of Alabama to join hands with us as we work together for better health, a better community and a better world.

Most sincerely,

Kay Guin

Mrs. James C. Guin, Jr.
President

Atlantic City, Host To AMA Convention, Has Unique Combination Of Facilities

Atlantic City, N. J., site of the American Medical Association's 116th Annual Convention, June 18-22, plays host to more than a half-million conventioners yearly.

About 32,000 people, including 12,000 physicians and 4,000 exhibitors will be on hand, for the event, to observe and discuss recent medical progress. This will be the 10th time since 1935 that the AMA convention has been held in Atlantic City.

Visitors will be welcomed by Atlantic City temperatures which average 67.7 degrees in June, with an average high of 73.9 during the day and an average low of 61.4 at night.

There is hardly a major convention, trade show or exposition held in the United States which has not convened in the famed seashore city. And, although Atlantic City has been a leading convention center since the turn of the century, recent years have been marked by an acceleration in construction which has given the island city a new, modern face.

The facilities include:

Hundreds of hotels and motels with a total of 32,000 rooms, all within relatively short distance of each other and of Convention Hall. This permits conventioners to be close to each other and to the convention's activities. More than 100 of the hotels and motels have indoor and outdoor swimming pools, and many have ice skating rinks.

A short driving distance to the major metropolitan centers of New York City, Philadelphia, Washington, D. C., Baltimore, and Wilmington. A third of the nation's population—60 million people—is within 500 miles, and 40 million people are within 300 miles.

Convention transportation by plane, train, bus, or automobile. Daily flights are scheduled into Atlantic City Airport, and quite frequently major airlines schedule charter

service directly into the Atlantic City Airport when charter service is required. Bader Field, five minutes from Atlantic City, accommodates private planes and charter service of smaller aircraft. The most frequent air service is into the International Airport at Philadelphia—only 25 minutes from Atlantic City, and about 60 minutes by non-stop express bus service and airport limousine service. The new Atlantic City Expressway, with maximum speeds of 70 miles an hour, connects Atlantic City and Philadelphia, and the new Garden State Parkway speeds motorists to Atlantic City from the New York City area.

Thousands of hotel and motel rooms are linked with Convention Hall by closed-circuit television.

Hundreds of restaurants with menus ranging from hot dogs to exotic gourmet dishes.

Extensive news coverage by wire services, newspapers, radio, and television.

And, most important, the air-conditioned Convention Hall. Built in 1929, it has 34 meeting rooms seating from 125 to 35,000 persons each. Its main auditorium has 6,000 permanent seats and space and equipment for nearly 30,000 additional seats.

The recent \$6 million Convention Hall modernization project added 50,000 square feet of exhibit space to bring the total to 320,000 square feet, extended the lobby 50 feet in width, added an under-the-Boardwalk weather-protected traffic tunnel entrance and installed a new lighting system which simulates daylight.

Convention Hall has three separate exhibit halls which may be operated independently and simultaneously.

Average temperature in Atlantic City in October is 57.4 degrees, with an average high of 64.2 during the day and an average low of 50.6 at night.

The Mediatrix Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.

"A steroid-nutritional compound (Mediatrix) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging... This therapy resulted in improvement of 75 per cent of the patients..."

McNeill, A. J.: Clin. Med. 8:518 (Mar.) 1961.

"Mediatrix (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics 12:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

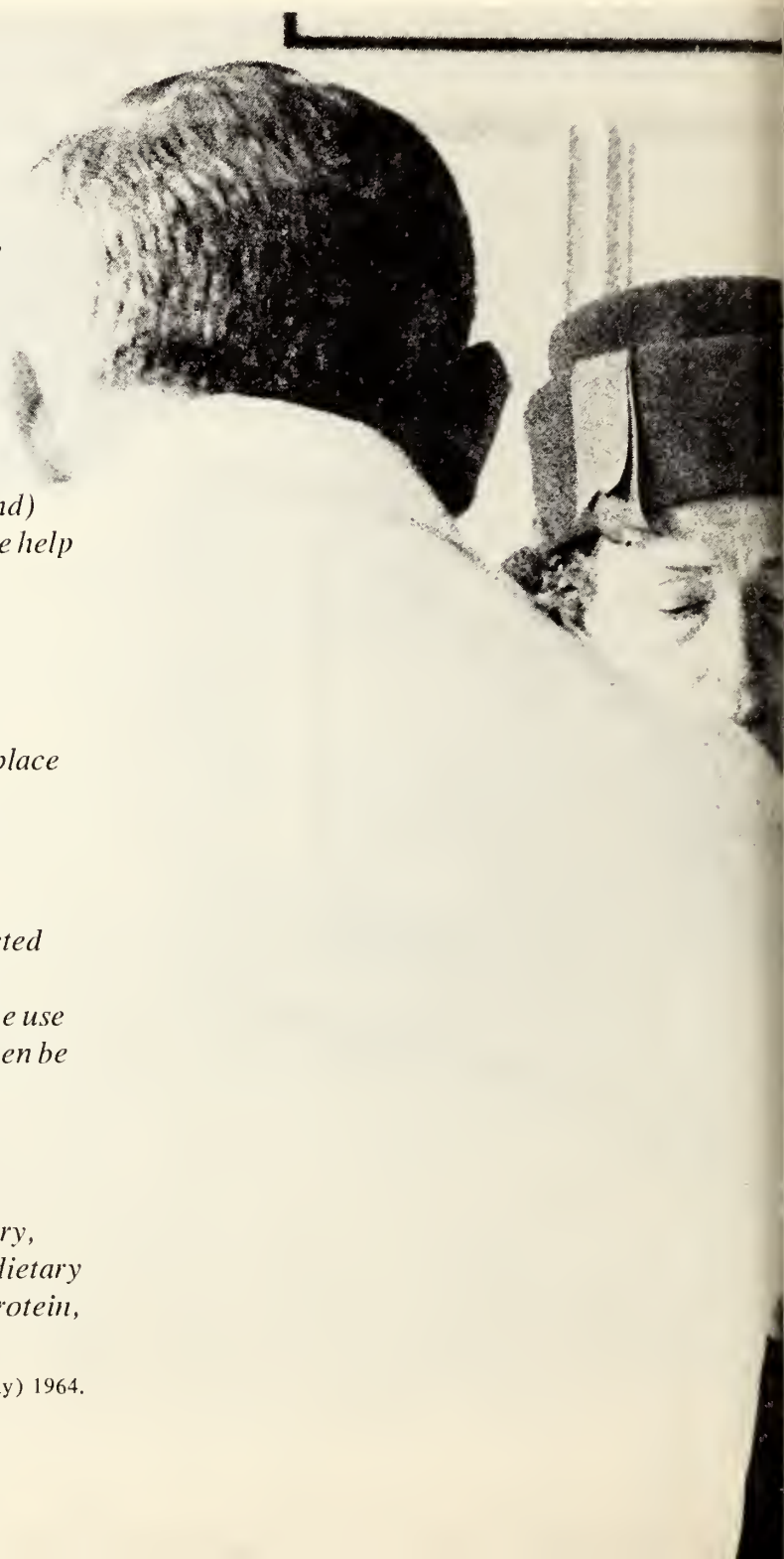
Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied... The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. 12:489 (May) 1964.



Mediatric®

Designed for the "metabolically spent"

Nutritional reinforcement for those who can't
— or won't — eat properly...balanced amounts of
estrogen and androgen to counteract declining
gonadal hormone secretion and its sequelae of
premature degenerative changes...mild
antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is **PREMARIN®** (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation*. It contributes a gentle "mood" uplift through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 — MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 — MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 — MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.

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Editorial COMMENT

The Mantle Rests On New Shoulders

The burdens of responsibility for providing guidance to the Medical Association of the State of Alabama passed last month from C. E. Robert Parker, where it has reposed since April, 1966, onto the shoulders of John Murphy Chenault of Decatur.

The highest honor which can be bestowed upon a member of the medical profession in Alabama brings with it tremendous responsibility and immeasurable sacrifice over one's personal desires and pleasures.

The Chairman of the Board of Censors, if he enters into no other activities, inherits three important jobs. First, he is the Chairman of the State Committee of Public Health which directs the activities of the Department of Public Health and the State Health Officer. Second, he is Chairman of the State Board of Medical Examiners and thereby responsible for the licensure of every practitioner. Third, he is Chairman of the Association's Board of Censors, which is its highest authority.

Either one of these three responsibilities would be sufficient unto itself, combined they require that the incumbent shall devote almost his entire time to some facet of medical activity.

As his predecessors before him have done, it is a certainty that Dr. Chenault will bear his new responsibilities with honor and dignity. His interest in the total field of medicine has already been attested. Not only does he occupy the number one position in the Medical Association, but he serves in



Dr. John M. Chenault

high capacity with the State Board of Mental Health.

Born in Decatur, Alabama, September 21, 1914, Dr. Chenault attended the public schools of Decatur and the University of Alabama where he received his A. B. Degree in 1938. He was awarded the M. D. Degree by Vanderbilt in 1942 followed by a one-year internship at Charity Hospital in New Orleans.

From July, 1943, to June, 1946, he served the Army Air Corps, being discharged with the rank of Captain. He entered private practice of medicine upon his departure from

(Continued on Page 1435)

The AMBAR
SCRAPBOOK of

Obesity Oddities

FACT & LEGEND

CHARLES
DICKENS'

"FAT BOY JOE"

in Pickwick Papers

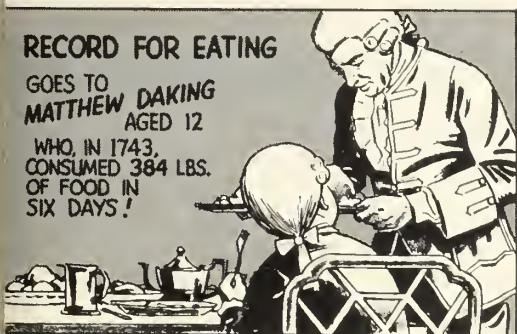
IS THE FIRST RECORDED CASE OF
OBESITY WITH NARCOLEPSY

DR. C. SIDNEY BURWELL COINED THE
TERM "PICKWICKIAN SYNDROME" IN 1955!



RECORD FOR EATING

GOES TO
MATTHEW DAKING
AGED 12
WHO, IN 1743,
CONSUMED 384 LBS.
OF FOOD IN
SIX DAYS!



THE Cost of AMBAR EXTENTABS

IS APPROXIMATELY
ONE-HALF THAT OF
OTHER LEADING
APPETITE
SUPPRESSANTS.



AN IMPORTANT FACTOR
IN LONG-TERM THERAPY!

CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

Ambar Extentab before breakfast can control most patients' appetite for up to 2 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety... helps maintain a state of mental calm and equilibrium. Both work together to ease the tensions that erode new willpower during periods of dieting.

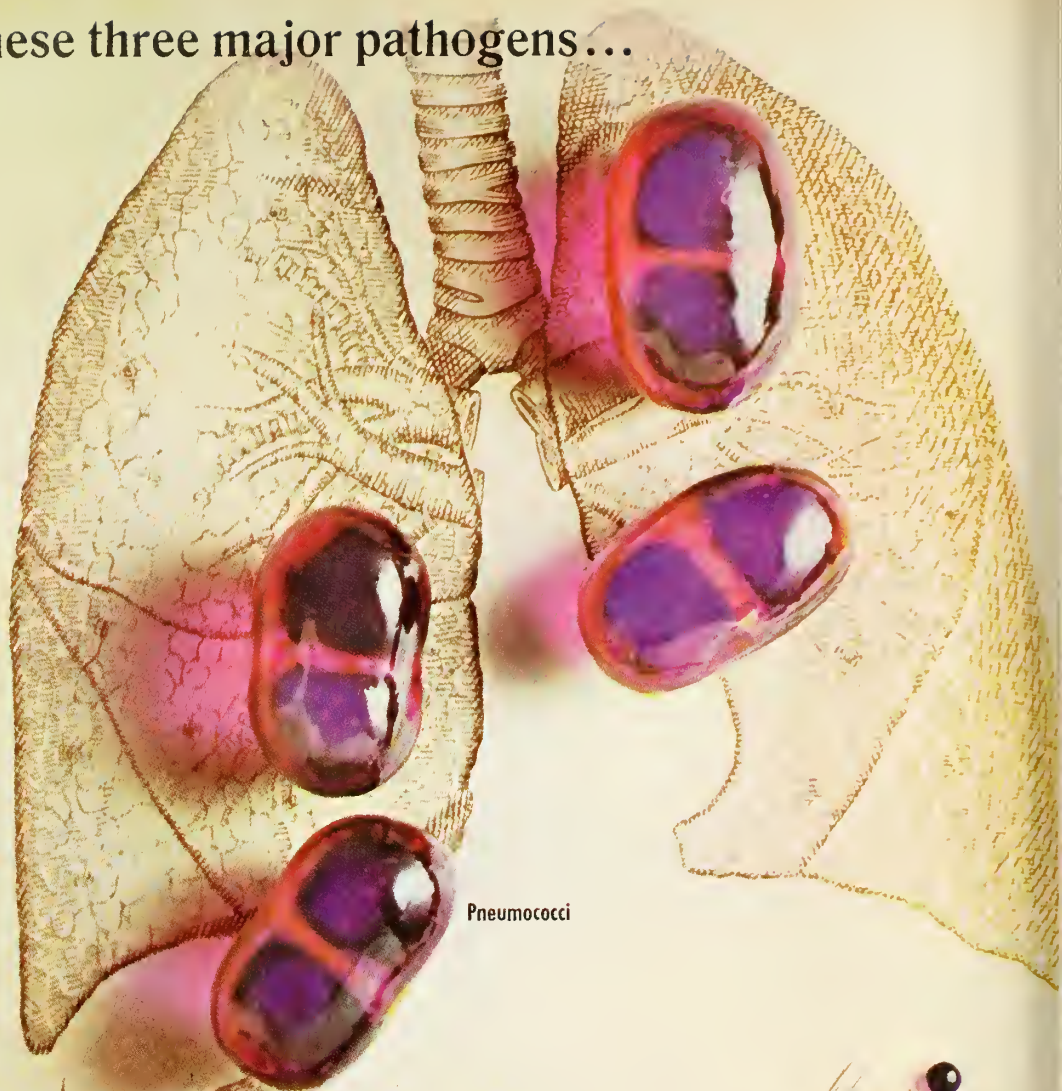
Available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/Indications: Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY,
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Against these three major pathogens...



Pneumococci

Penicillin-Sensitive
Staphylococci



Beta-Hemolytic
Streptococci



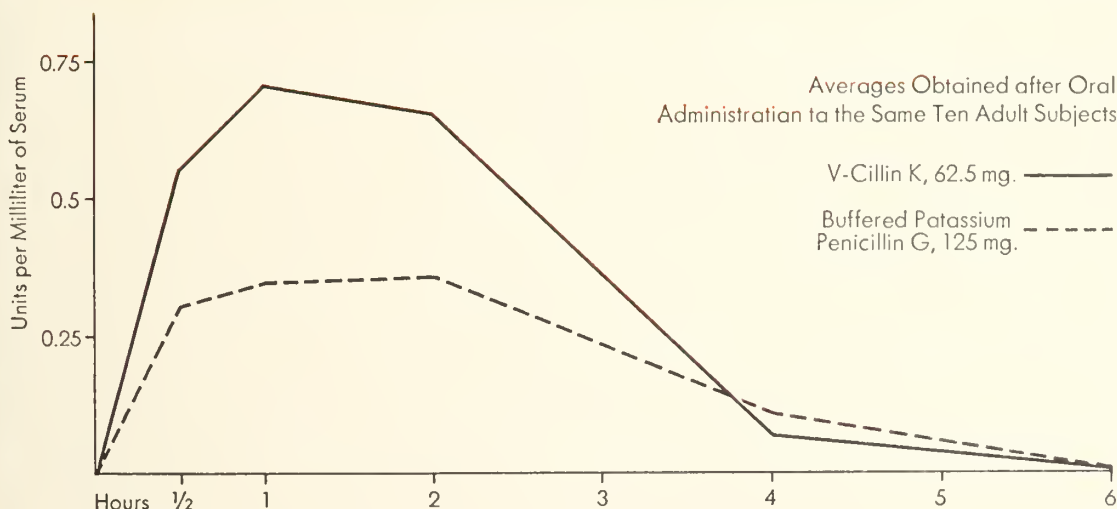
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive)		Streptococcus, Group A		Diplococcus Pneumoniae	
	MIC (mcg./ml.)		MIC (mcg./ml.)		MIC (mcg./ml.)	
	Median	Range	Median	Range	Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K®  700636
Potassium Phenoxyethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxy-methyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxy-methyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with parenteral dosage schedules, frequent evaluation of the renal hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin reactions ranging from maculopapular eruptions to exfoliative dermatitis, urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Refractory infections generally respond to a second treatment three to four days following completion of first. Treatment of gonorrhea with severe complications should be individualized, with prolonged and intensive treatment. Patients with suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units) in bottles of 50 and 100; and 250 mg. (400,000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) in 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.



(Continued from Page 1430)

the service in association with his late uncle Dr. Frank L. Chenault and his cousin Dr. Erskine M. Chenault. Dr. Erskine's son Dr. Sidney B. Chenault joined them about ten years ago.

His range of interests in organized medicine has run the gamut from his own county medical society to the AMA, of which he has served as a delegate since 1962. He is now serving his second five-year term on the Board of Censors. Of all Dr. Chenault's qualifications, the most valuable to this Association undoubtedly is his knowledge of and interest in the field of legislation. He came to the Board of Censors at a time when organized medicine was taking an increased interest in legislation being enacted at the state and national levels. He immediately became involved in a fight to prevent the Bureau of Mental Health from being split up from the Department of Public Health and created as a separate department of the government. When this fight was lost, he accepted membership to the first board of mental health and has worked arduously in that vineyard.

After passage of the Medicare Law, which he opposed as wasteful extravagance and a step toward socialized medicine, he accepted services on one of AMA's technical advisory committees to the Social Security Administration to help make the law workable.

He was a leader in the fight, during 1965, to obtain additional finances for the State Department of Public Health. He worked for legislation to increase medical education facilities at the Medical College of Alabama.

With his experience in the professional, civic, and religious fields, Dr. Chenault will represent medicine well as Chairman of the Board of Censors. He will have the unqualified support of the other nine members of the Board as well as those who have held the post of Chairman before him. Not the least of his strength will be the gracious lady whom he married in 1941, the former Belle Montgomery of Tuscaloosa, who has borne him five children while herself serving major roles in the Woman's Auxiliary of this Association and AMA.

The *Journal* salutes Dr. Chenault upon the assumption of his new duties and looks forward to reporting the progress he is certain to achieve.

Traffic Safety: A Physician's Concern

History records that in 1892 a new-fangled "horseless carriage" collided with a horse-drawn buggy on a New York City street. The driver of the buggy was fatally injured. This victim occupies a unique place in American history inasmuch as he was the first recorded traffic fatality in America. He was not the last.

Last year a record 52,500 Americans died in traffic accidents, another 2,000,000 were injured. The economic loss resulting from these mishaps has been estimated at a staggering \$11 billion.

It was against this backdrop that the Con-

gress of the United States was provoked to take action, approving two landmark bills to provide a framework for federal traffic safety standards governing drivers, roads and vehicles.

The two new federal laws—the National Traffic and Motor Vehicle Safety Act and the Highway Safety Act—can be expected to produce little less than a traffic safety revolution in this country.

There is nothing new about the scheme the federal government will employ in making certain states participate in this mass assault on traffic accidents. It is the well-

used gimmick of federal funds. States which do not hew the line to the satisfaction of the National Highway Safety Agency will see their federal roadbuilding funds cut back 10 per cent. On the other hand, states which comply will receive substantial federal assistance. The federal government is prepared to expend \$420 million during the next four years in the participating states.

The deadline for compliance with the federal act is January 1, 1969, and with this in mind the Alabama Legislature in its recent special session approved a resolution creating a committee to study in detail the provisions of the federal law and ascertain what state legislation, if any, is needed for Alabama to comply.

The work of this committee, and any legislation forthcoming from it, is of particular concern to the Medical Association of the State of Alabama. One of the suggested federal guidelines is a physical examination of drivers, particularly the vision of drivers 65 and over. Another proposed rule is a medical examination of fatally injured motorists for alcohol, and still another is the participation of state health agencies in licensing and in accident investigation.

With it evident that a major drive is underway in traffic safety, a drive which will deeply involve physicians, the Board of Censors of MASA has already approved the creation of a new standing committee on traffic safety. It will be this committee which will be in the forefront of the traffic safety campaign, but this committee will require and will deserve the support of all physicians.

AMA CONVENTION

JUNE 18-22

ATLANTIC CITY, NEW JERSEY

Liberal Abortion Laws Favored

Elsewhere in this issue of the Journal is a reprint from *Modern Medicine* entitled "Abortion: The Doctor's Dilemma." We strongly recommend its reading to you.

The article is based on a survey of more than 40,000 doctors, and it shows an overwhelming number of them—in America and in Alabama—favor a liberalization of abortion laws.

It is at least mildly surprising that support for more liberal abortion laws is as strong in Alabama as it is nationally—approximately 88% of the physicians in this state supported liberalization. This was also the national average.

This is surprising simply because Alabama already has what, at least by comparison with most other states, is a rather liberal law on this subject. No less than 44 states in the nation now have laws permitting an abortion only to save the life of the expectant mother. In the remaining six states, Alabama included, an abortion is prohibited "unless the same is necessary to preserve her life or health . . ." (Title 14, Section 9, Code of Alabama, 1958). The two words "or health" were added by the Legislature in 1951. The Alabama law is quite liberal in yet another regard—whereas in most states a non-therapeutic abortion is a felony, in Alabama it is a misdemeanor, carrying with it a maximum punishment of a \$1,000 fine and 12 months hard labor in the county jail.

It is quite possible that Alabama's abortion law may come under legislative scrutiny this year. Whether or not the state statute is in need of amendment is a point worthy of consideration, but it is of significance to note that the *Modern Medicine* survey indicates a substantial majority of Alabama physicians feel that some changes are needed.



around the state

Dr. J. O. Finney Joins Faculty Of University of Alabama Medical Center

Dr. J. O. Finney, of Gadsden, immediate past president of the Medical Association of the State of Alabama, will join the faculty of the University of Alabama's Medical Center as professor of medicine, Medical College of Alabama, and associate director of the Regional Medical Program for Heart Disease, Cancer and Stroke.

As associate director of the Regional Medical Program, Dr. Finney will serve as principal liaison between the Medical Center and practicing physicians of the state in development of the program.

In January, 1967, the National Institutes of Health awarded for the state of Alabama, through the University of Alabama Medical Center, a grant to support planning activities for a program to improve the level of diagnosis and treatment of heart disease, cancer and stroke. The award was for the first year of a two and one-half year planning program which will involve the co-operative efforts of representatives from health professional groups, volunteer health agencies, hospitals, and other health related institutions, as well as concerned laymen.

A major role of the Regional Medical Program, when it is brought into operation, will be to provide physicians of the state, through continuing education, with the latest information on advances in the diagnosis and treatment of heart disease, cancer, stroke and related diseases.

Dr. Joseph F. Volker, vice-president for Birmingham affairs and director of the Medical Center, University of Alabama, is coordinator of the Regional Medical Program.

Dr. Volker said of Dr. Finney's appointment: "We are fortunate and pleased to have Dr. Finney join the Medical Center faculty and accept the duties and responsibilities of this very important role in the development of the Regional Medical Program. Dr. Finney's history of leadership in the medical community and his interest in improving the quality and availability of health care for the people of this region render him the logical choice for this position."

Dr. S. Richardson Hill, Jr., dean of the Medical College of Alabama, and Dr. Walter B. Frommeyer, Jr., professor and chairman of the Department of Medicine, also expressed their pleasure upon the occasion of Dr. Finney's appointment.

In announcing his acceptance of the Medical Center appointment, Dr. Finney said: "My family and I are deeply indebted to our friends, my patients and professional colleagues in Gadsden and Northeast Alabama for their loyalty and devotion over the past three decades in which I have been engaged in the private practice of medicine. I wish to thank the Sisters and staff of the Holy Name of Jesus Hospital for their confidence and support over the years in permitting me the distinction of serving as chairman of the Department of Medicine. Further, I am appreciative of the privileges extended me as a member of the staff of the Baptist Memorial Hospital. Both institutions are rendering outstanding service to the people of Northeast Alabama."

(Continued on Page 1440)



now NovestrolTM (ethinyl estradiol U.S.P.)

estrogen replacement therapy

for the menopausal syndrome and female hypogonadism. Novestrol, a pure synthetic estrogen derivative, is related to estradiol which is the primary hormone of the ovarian follicle. It is effective orally and has all the actions of naturally occurring estrogen.

Ethinyl estradiol is the most active estrogen known. In addition to its high potency, Novestrol offers patients the advantages of minimal side effects, low cost, and convenience. Usually only a single daily dose is necessary.

Description: Each green, sugar-coated tablet contains 0.02 mg. of ethinyl estradiol U.S.P., a pure synthetic estrogen derivative, the most active estrogen known.

Indications: Menopausal syndrome and female hypogonadism.

Contraindications: Patients with tumors which estrogen might stimulate.

Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

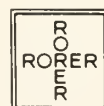
Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.



WILLIAM H. RORER, INC. Fort Washington, Pa.

(Continued from Page 1437)

"After long and serious deliberation, my wife and I felt compelled to accept this call to assume the broader duties and responsibilities as professor of medicine in the Medical College and associate director of the Regional Medical Program."

Dr. Finney, a native of Florence, Alabama, has served as a specialist in internal medicine in Gadsden, Alabama, for the last thirty-one years, except for a four-year period during World War II when he was a U. S. Army medical officer.

Dr. Finney received his A. B. and M. D. degrees from Vanderbilt University and interned at Vanderbilt University Hospital. He has maintained an active interest in the affairs of Vanderbilt University and served as president of the Vanderbilt University Medical Alumni Association in 1965-66.

Professional honors and positions of prominence accorded Dr. Finney have been numerous. In addition to his service as president of the Medical Association of the State of Alabama in 1966-67, Dr. Finney has

served as president of the Alabama Society of Internal Medicine and president of the Alabama Heart Association. He is a trustee of Snead College in Boaz, Alabama. He is a Fellow in the American College of Physicians and a Diplomate on the American Board of Internal Medicine. Dr. Finney is a consultant in medicine at the Veterans Administration Hospital in Birmingham and has served as clinical professor of medicine in the Medical College of Alabama since 1945.

Dr. Finney is a director of the American National Bank in Gadsden and a director of the Life Insurance Company of Alabama. He is past chairman and past trustee of the First Methodist Church in Gadsden.

Dr. Finney is married to the former Margaret Pride of Florence, Alabama. Their son, Dr. James O. Finney, Jr., graduated from Vanderbilt School of Medicine in 1965 and is now a resident in internal medicine at the University of Alabama Hospitals and Clinics in Birmingham, Alabama. Lane, their daughter, lives with the Finney's in Gadsden.

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Medical College Receives AMA-ERF Gift of \$13,976.83

A gift of \$13,976.83 from the American Medical Association Education Research Foundation has been received by the Medical College of Alabama. The gift represents an increase over 1965 of nearly \$4,000.

Dr. F. J. L. Blasingame, Executive Vice President of AMA, notified the Medical College Dean, Dr. S. Richardson Hill, Jr., of the gift.

It was learned that the increased amount was due to the extra efforts and fund raising projects promoted by the Women's Auxiliary of the Medical Association of the State of Alabama headed by Mrs. B. H. Johnson, Jr., Bessemer state chairman.

Dr. Hill praised the MASA members and their wives for this gift and commented, "because so much of the present funding for medical colleges is through grant support which is restricted to research and specific areas of service, an unrestricted grant such as the AMA-ERF fund, which is generally used for teaching purposes, assumes an im-

portance far beyond the actual amount of the grant itself in our overall missions."

Dr. Hill also praised Dr. Carl Grote, Huntsville chairman, and the public relations committee of the Medical Association of the State of Alabama for their contributions to the fund.

The allocation to the Medical College included \$11,162.45 in contributions specially designated to Alabama plus \$2,814.38 given every four-year medical school in the United States, making a total of \$13,976.83.

Upon receipt of Dr. Blasingame's letter Dr. Hill said: "On behalf of the administration, faculty, staff and student body of the Medical College of Alabama, I would like to express our deep gratitude and admiration to the American Medical Association and particularly to our local state and county societies and most especially to the wives of our physicians who have worked so hard to make this possible."

(Continued on Page 1446)



when he just can't sleep
Tuinal[®]

**One-Half Sodium Amobarbital and
One-Half Sodium Secobarbital
supplied in $\frac{3}{4}$, $1\frac{1}{2}$, and 3-grain Pulvules[®]**



Tuinal helps wakeful patients fall asleep fast, stay sleep all night.

Indications: Tuinal, comprised of equal parts of Seconal[®] sodium (sodium secobarbital, Lilly) and Amytal[®] Sodium (sodium amobarbital, Lilly), is indicated for prompt and moderately long-acting hypnosis. Not suitable for continuous daytime sedation.

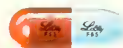
Contraindications: Barbiturates should not be administered to anyone with a history of porphyria, nor should they be given in the presence of uncontrolled pain, because excitement may result.

Warning: May be habit-forming.

Precautions: Tuinal should be used cautiously in pa-

tients with decreased liver function, since prolongation of effect may occur.

Adverse Reactions: Idiosyncrasy, such as excitement, hangover, or pain, may appear. Hypersensitivity reactions occur in some patients, especially in those with asthma, urticaria, or angioneurotic edema.



Dosage: 1½ to 3 grains at bedtime.

Additional information available to physicians upon request.

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(Continued from Page 1443)

Vital Statistics

NEW MEMBERS

Etowah County

Steinberg, Morris, Noojin Building, Gadsden, Ala., 35901.

Macon County

Dowe, Calvin Ray, 108 Reed Avenue, Tuskegee Institute, Ala., 36088.

Foster, Henry Wendell, John A. Andrew Hospital, Tuskegee Institute, Ala., 36088.

Giles, Julian Wheatley, Drawer G, VA Hospital, Tuskegee, Ala., 36083.

Hester, George Carl, Jr., 209 East Northside Street, Tuskegee, Ala., 36083.

McRae, Luther Curtis, Jr., 104 South Maple Street, Tuskegee, Ala., 36083.

Settler, Sheridan Howard, Jr., John A. Andrew Hospital, Tuskegee Institute, Ala., 36088.

Madison County

Frierson, Wallace Brown, NASA Marshall Space Flight Center, Building 4746, Redstone Arsenal, Ala., 35808.

Mobile County

Davis, Milas Eldon, Jr., Mobile General Hospital, Mobile, Ala., 36603.

Hurd, Thomas Clinton, Jr., Mobile General Hospital, Mobile, Ala., 36603.

Semon, John Emanuel, Mobile General Hospital, Mobile, Ala., 36603.

Montgomery County

Givhan, Edgar Gilmore, II, 1415 East South Boulevard, Montgomery, Ala., 36111.

Guest, James Lee, Jr., 2119 East South Boulevard, Montgomery, Ala., 36111.

McCall, Doy Leale, Jr., 750 Washington Avenue, Montgomery, Ala., 36104.

Smith, Charles Harold, 1235 Forest Avenue, Montgomery, Ala., 36106.

Thomas, Marcus Clay, 351 South Ripley Street, Montgomery, Ala., 36104.

Weathington, Warren Thomas, State Office Building, Montgomery, Ala., 36104.

Morgan County

McKenzie, Jolly, 806 13th Avenue SE., Decatur, Ala., 35601.

Sims, William Arthur, 1501 7th Street SE., Decatur, Ala., 35601.

Stamler, Arthur Alan, 1121 Somerville Road SE., Decatur, Ala., 35601.

Wiley, James Boyce, Jr., 222 Gordon Drive SE., Decatur, Ala., 35601.

MEMBERS REMOVED OR DECEASED

Calhoun County

Cobb, Sanford, moved to Chicago, Illinois.

Crawford, Samuel J., moved to Mandeville, Louisiana.

Covington County

Melton, Thomas Albert, Andalusia, Ala. Deceased April 24, 1967.

Dallas County

Moore, John Wilson, moved to Laurel, Mississippi.

Houston County

Gedney, Leigh Matthias, moved to 2873 Harcourt Drive, Decatur, Georgia.

Jefferson County

Lovelady, Robert Grady, Birmingham, Ala. Deceased March 23, 1967.

Madison County

Church, Jackie Lee, moved to Nashville, Tennessee.

Walker, Moody, 104 Lincoln Street, Huntsville, Ala. Deceased December 16, 1966.

Marengo County

Gaillard, Thomas Hamilton, Magnolia, Ala. Deceased December 13, 1966.

Marion County

Metzger, William Edgar, 2392 Jackson Avenue, Memphis, Tenn. Moved out of state.

Marshall County

Couch, Ezekiel H., Guntersville, Ala. Deceased April 20, 1967.

Mobile County

Wise, Irvin Milton, Mobile, Ala. Deceased April 25, 1967.

Montgomery County

Herbert, Floris Mary, moved to New Orleans, La.

Wilhite, Glenn Eugene, VA Hospital, Lake City, Florida. Moved out of state.

Morgan County

Adams, George Wilburn, 619 Bank Street, Decatur, Ala. Deceased November, 1966.

Keeton, William Carter, 222 Gordon Drive, Decatur, Ala. Moved out of state.

Lewis, Thomas Knight, Jr., 1121 Somerville, Decatur, Ala. Moved out of state.

Shaffer, Sylvester Allen, Decatur, Ala. Moved out of state.

Talladega County

Washam, James M., Jr., Talladega, Ala. Moved.

Walker County

Johnson, James Lee, Jasper, Ala. Moved to Tennessee.

Knarr, Donald Richard, Jasper, Ala. Moved to Texas.

TRANSFERS

Calhoun County

Sanford, Howard Maurice, Jr., present Jasper, Ala., to Chocotocco Street, Oxford, Ala., 36203. (Transfer from member Walker County Medical Society to member Calhoun County Medical Society.)

Dallas County

Angle, David Lee, present Birmingham, Ala., to 805 Mangum Avenue, Selma, Ala., 36701. (Transfer from member Jefferson County Medical Society to member Dallas County Medical Society.)

Houston County

Hundley, Rube R., present Birmingham, Ala., to 211 West Main Street, Dothan, Ala., 36301. (Transfer from member Jefferson County Medical Society to member Houston County Medical Society.)

Lamar County

Davis, William E., present Greenville, Ala., to Vernon, Ala., 35592. (Transfer from member Butler County Medical Society to member Lamar County Medical Society.)

Lee County

Brock, William Michael, present Montgomery, Ala., to 1710 Pepperell Parkway, Opelika, Ala., 36801. (Transfer from member Montgomery County Medical Society to member Lee County Medical Society.)

Turk, William Brooke, present Evergreen, Ala., to Auburn University, Drake Infirmary, Auburn, Ala., 36830. (Transfer from member Conecuh County Medical Society to member Lee County Medical Society.)

Macon County

Campbell, Thomas Monroe, Jr., 404 Bibb Street, Tuskegee Institute, Ala., 36088. (Transfer from Nonmember Macon County to Member Macon County Medical Society.)

Dibble, Eugene Heriot, Drawer DD., Tuskegee Institute, Ala., 36088. (Transfer from Nonmember Macon County to Member Macon County Medical Society.)

Hume, John Franklin, 314 Bibb Street, Tuskegee Institute, Ala., 36088. (Transfer from Nonmember Macon County to Member Macon County Medical Society.)

Kenny, Howard Washington, John A. Andrew Memorial Hospital, Tuskegee Institute, Ala., 36088. (Transfer from Nonmember Macon County to Member Macon County Medical Society.)

Madison County

Clanton, Jerry Ned, present Birmingham, Ala., to Huntsville Hospital, Huntsville, Ala., 35801 (Transfer from member Jefferson County Medical Society to member Madison County Medical Society.)

Mobile County

Rencher, James Lamar, present New Orleans, La., to Mobile General Hospital, Mobile, Ala., 36617. (Transfer from member Baldwin County Medical Society to member Mobile County Medical Society.)

Montgomery County

Clotfelter, David Waniess, 4023 Camellia Drive, Montgomery, Ala., 36109. (Transfer from member Montgomery County to non-member Montgomery County.)

Draughon, Robert L., Jr., present Birmingham, Ala., to 1235 Forest Avenue, Montgomery, Ala., 36106. (Transfer from member Jefferson County to member Montgomery County Medical Society.)

Morgan County

Bowers, David Earl, present Athens, Ala., to 1121 Somerville Road, Decatur, Ala., 35601. (Transfer from member Limestone County Medical Society to member Morgan County Medical Society.)

Oliver, Robert K., present Tuscaloosa, Ala., to 1601 Chenault Drive, Decatur, Ala., 35601. (Transfer from member Tuscaloosa County Medical Society to member Morgan County Medical Society.)

Tuscaloosa County

Fowler, Inez, present Birmingham, Ala., to Student Health Center, Box Y, University, Ala., 35486. (Transfer from member Jefferson County to member Tuscaloosa County Medical Society.)

CHANGES OF ADDRESS

Baldwin County

Rockwell, L. E., Jr., present Montrose, Ala., to Daphne, Ala., 36526.

Wallace, Gerald L., present Bay Minette, Ala., to General Delivery, Satsuma, Ala., 36572.

Chambers County

Herring, James R., present LaFayette, Ala., to Lloyd Noland Hospital, Fairfield, Ala., 35064.

Marshall, W. L., present Mobile, Ala., to Lanier Memorial Nursing Home, Langdale, Ala., 36864.

McCrary, Ellann, present Langdale, Ala., to P. O. Box 425, Lanett, Ala., 36863.

Coffee County

Kimmey, John M., present Elba, Ala., to 207 East Brunson Avenue, Enterprise, Ala., 36330.

Dallas County

Feulner, Charles D., present Selma, Ala., to 2012 Church Street, Selma, Ala., 36701.

Ross, Carlos J., present Selma, Ala., to 521 Alabama Avenue, Selma, Ala., 36701.

Stewart, J. H., Jr., present Selma, Ala., to 712 Alabama Avenue, Selma, Ala., 36701.

Williams, J. R., present Selma, Ala., to 716 Pettus Street, Selma, Ala., 36701.

Franklin County

Underwood, Ralph O., present Russellville, Ala., to 106 Marion Street SE., Russellville, Ala., 35653.

Houston County

McFatter, Theron K., present Dothan, Ala., to 509 West Main Street, Dothan, Ala., 36301.

Jefferson County

Accinno, M. A., present Birmingham, Ala., to 2201 Vestavia Drive, Birmingham, Ala., 35216.

Amato, Simone Joseph, present Fairfield, Ala., to Fox Valley Farm, Route 1, Maylene, Ala., 35114.

Bancroft, Josiah D., present Birmingham, Ala., to 1919 South 7th Ave., Birmingham, Ala., 35233.

Barron, James M., present Birmingham, Ala., to 1308 42nd Street, Ensley, Birmingham, Ala., 35208.

Becton, James Alvis, present Birmingham, Ala., to 7000 South 5th Avenue, Birmingham, Ala., 35206.

Bishop, Brooks, present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala., 35205.

Brascho, Donn Joseph, present Birmingham, Ala., to 1919 South 7th Avenue, Birmingham, Ala., 35233.

Burttram, H. D., present Birmingham, Ala., to 1529 North 25th Street, Birmingham, Ala., 35234.

Carmichael, James Donald, present Birmingham, Ala., to 1032 South 18th Street, Birmingham, Ala., 35213.

Collins, C. D., present Birmingham, Ala., to 700 South 19th Street, Birmingham, Ala., 35233.

- Compton, Merrill E., Jr., present Birmingham, Ala., to 206 Dolphin Drive, Del mar MOQ, Oceanside, California, 92054.
- Cook, Malcolm Cade, present Birmingham, Ala., to 2217 Gay Way-Vestavia, Birmingham, Ala., 35216.
- Dawson, Lewis M., present Birmingham, Ala., to 2930 12th Avenue North, Birmingham, Ala., 35223.
- Deason, Alpheus Monroe, Jr., present Birmingham, Ala., to 1000 South 14th Street, Birmingham, Ala., 35205.
- Donovan, Barbara F. M., present Birmingham, Ala., to Gardendale Medical Center, Gardendale, Ala., 35071.
- Ford, Walter Reese, Jr., present Birmingham, Ala., to 303 Oxmoor Road, Birmingham, Ala., 35209.
- Glenn, E. Byron, present Birmingham, Ala., to 1025 South 18th Street, Birmingham, Ala., 35205.
- Guffin, Gilbert Truett, present Gardendale, Ala., to Gardendale Medical Center, Gardendale, Ala., 35071.
- Hamrick, Leon C., present Birmingham, Ala., to Lloyd Noland Hospital, Fairfield, Ala., 35064.
- Hefner, Lloyd Lee, present Birmingham, Ala., to 1909 South 7th Avenue, Birmingham, Ala., 35233.
- Hicks, Julius Norton, present Birmingham, Ala., to 924 South 18th Street, Birmingham, Ala., 35205.
- Hughes, Brady A., present Birmingham, Ala., to 718 City National Bank Building, Birmingham, Ala., 35203.
- Johnson, Charles M., present Birmingham, Ala., to Lloyd Noland Hospital, Fairfield, Ala., 35064.
- Jones, James K., present Birmingham, Ala., to 33 S. E. 3rd Street, Boca Raton, Florida.
- LeMay, Bobby P., present Birmingham, Ala., to 1001 28th Place South, Birmingham, Ala., 35205.
- Lewis, Herbert J., present Birmingham, Ala., to City National Bank Building, Birmingham, Ala., 35201.
- Lewis, Thomas K., present Gulfport, Mississippi, to 130 Southern Circle, Mississippi City, Mississippi, 39562.
- Littlejohn, W. S., present Birmingham, Ala., to 518 Medical Arts Building, Birmingham, Ala., 35205.
- Locke, William W., present Birmingham, Ala., to City National Bank Building, Birmingham, Ala., 35201.
- Lyons, James A., Jr., present Indianapolis, Indiana, to U. S. Army Hospital, EENT Service, Fort Campbell, Kentucky.
- Neighbors, James A., present Birmingham, Ala., to 3041 Ensley Avenue, Birmingham, Ala., 35201.
- Patton, Francis M., present Birmingham, Ala., to Lloyd Noland Hospital, Fairfield, Ala., 35064.
- Penton, Robert S. B., present Fairfield, Ala., to 1812 34th Street, Birmingham, Ala., 35218.
- Robertson, Brison O., Sr., present Birmingham, Ala., to 19 City National Bank Building, Birmingham, Ala., 35203.
- Robertson, William H., present Birmingham, Ala., to 2700 10th Avenue South, Birmingham, Ala., 35205.
- Scofield, Paul D., present Fairfield, Ala., to 1040 Martha Lee Avenue, Rockledge, Florida, 32955.
- Scott, Edward Van Zile, present Birmingham, Ala., to 1000 14th Street South, Birmingham, Ala., 35205.
- Shelton, James B., present Birmingham, Ala., to 1115 North 24th Street, Birmingham, Ala., 35234.
- Sperling, David, present Birmingham, Ala., to 2160 Highland Avenue, Birmingham, Ala., 35205.
- Spira, Victor, present Birmingham, Ala., to 618 City National Bank Building, Birmingham, Ala., 35203.
- Sullivan, Melvin Bruce, Jr., present Birmingham, Ala., to 1032 South 18th Street, Birmingham, Ala., 35205.
- Taylor, William H., Jr., present Birmingham, Ala., to 1529 North 25th Street, Birmingham, Ala., 35234.
- Timberlake, Landon, present Birmingham, Ala., to 1000 South 14th Street, Birmingham, Ala., 35205.

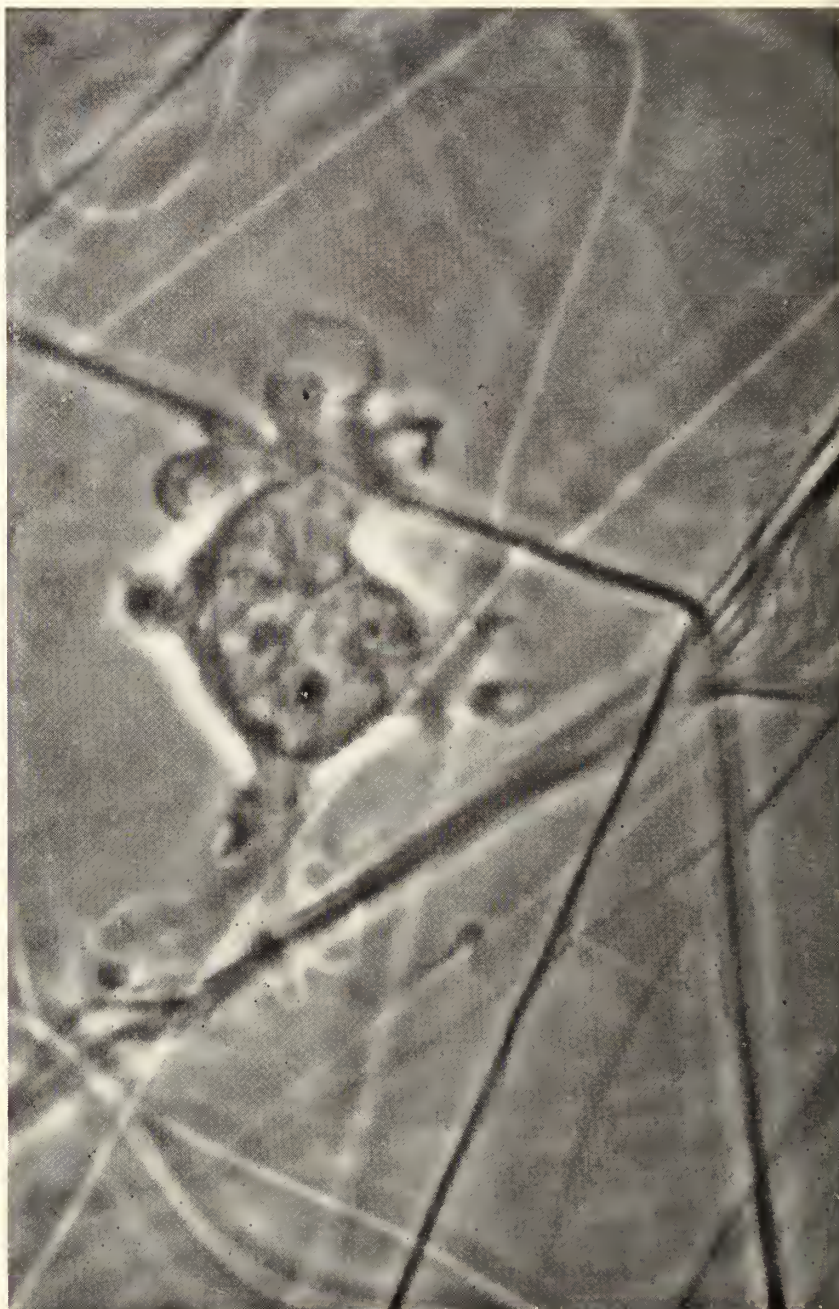
(Continued on Page 1454)

INFLAMMATION: A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

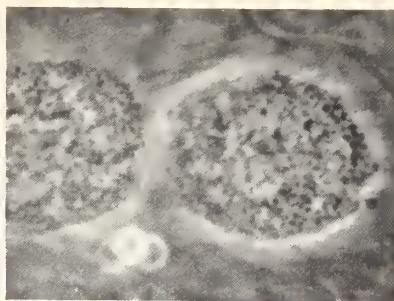


Visual evidence of how corticosteroids influence the inflammatory reaction

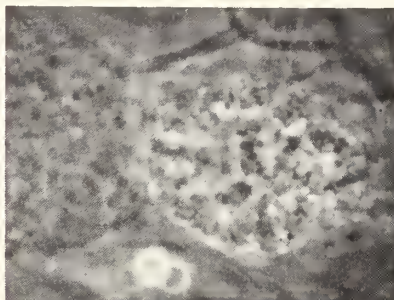
Working with phase-contrast cinematography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



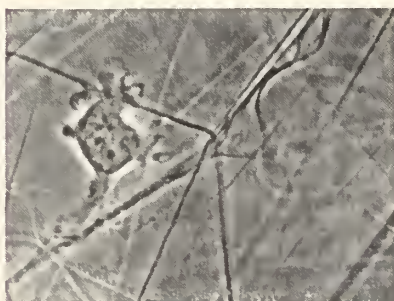
Phase-contrast microscopy showing mast cell before injury.



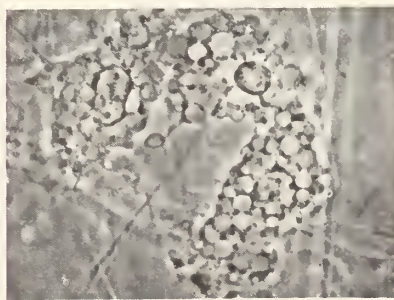
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid — Synalar (fluocinolone acetonide) — the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.

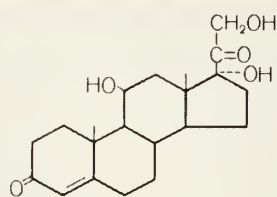


In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

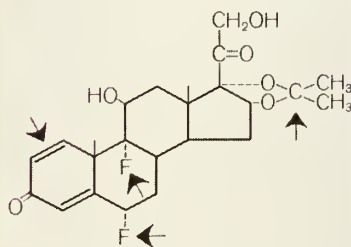
*A New View of Corticosteroid Action in Inflammatory Dermatoses, a film based on this study, is now available from your Syntex representative.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more corticosteroid. And it can often do it more effectively.



Hydrocortisone



Fluocinolone Acetonide (Synalar)

- ☐ a double bond between carbons 1 and 2
- ☐ fluorine substitutions at both the 6- α , and the 9- α positions
- ☐ the addition of the acetonide at the 16- α , 17- α positions, thus providing one of the most potent topical corticosteroids available.

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY¹⁻⁴ is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B— injected with 1, 2 and 4 mg. of hydrocortisone—show progressively smaller thymuses as does Group C— injected with fluocinolone acetonide—but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY¹⁻⁴ also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. **PRECAUTIONS:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for pro-

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

longed periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. **SIDE EFFECTS:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. *Ann NY Acad Sci* 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. *Proc Soc Exp Biol Med* 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: *Methods of hormone research*, New York, Academic Press, 1964, vol. III, pp. 234-280. 4. Gubersky, V. R.: To be published.

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For inflammatory
dermatoses...
by any measure
a topical corticosteroid
of choice

Synalar®

(fluocinolone
acetonide)

Milligram for milligram
one of the most active topical
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in antiinflammatory and
antipruritic activity

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those of systemic corticosteroids
with fewer hazards

(Continued from Page 1449)

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Warrisk, George W., present Birmingham, Ala., to 810 Medical Arts Building, Birmingham, Ala., 35205.

Windsor, James Lowery, present Woodward, Ala., to 1529 North 25th Street, Birmingham, Ala., 35234.

Wright, Durward O., present Birmingham, Ala., to 2749 Millbrook Road, Birmingham, Ala., 35243.

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Herring, John Stephen, present Florence, Ala., to P. O. Box 1036, Florence, Ala., 35630.

Heslington, Hurston Farrar, present Florence, Ala., to P. O. Box 588, Florence, Ala., 35630.

Hyatt, Arthur Jack, present Florence, Ala., to P. O. Box 588, Florence, Ala., 35630.

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Hand, Stanley D., present Athens, Ala., to West Market Street, Athens, Ala., 35611.

Norwood, Eston G., present Athens, Ala., to Sanders Street, Athens, Ala., 35611.

Madison County

Alison, William E., present Huntsville, Ala., to 806 Gallatin Street, Huntsville, Ala., 35801.

Crowson, Lawrence B., Jr., present Huntsville, Ala., to 806 Gallatin Street, Huntsville, Ala., 35801.

Gay, Otis F., present Huntsville, Ala., to Madison County Health Department, P. O. Box 425, Huntsville, Ala., 35801.

Maxwell, Oscar N., Jr., present Huntsville, Ala., to 800 Gallatin Street, Huntsville, Ala., 35801.

Owens, A. H. M., present Huntsville, Ala., to Occupational Health Services, Building 7110, Redstone Arsenal, Ala., 35808.

Reynolds, Dallas B., present Huntsville, Ala., to 806 Gallatin Street, Huntsville, Ala., 35801.

Shook, Burton S., Sr., present Huntsville, Ala., to Occupational Health Services, Building 7110, Redstone Arsenal, Ala., 35808.

Stewart, Robert E., present Huntsville, Ala., to 724 Madison Street, Huntsville, Ala., 35801.

Wells, James Cook, present Huntsville, Ala., to 930 Franklin Street, Suite 207, Huntsville, Ala., 35801.

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Alves, Walter J., present Guntersville, Ala., to Medical Arts Center, Guntersville, Ala., 35976.

Boggess, John Wilson, III, present Guntersville, Ala., to Medical Arts Center, Guntersville, Ala., 35976.

Christian, Kenneth Grantland, present Albertville, Ala., to 200 South Broad Street, Albertville, 35950.

Christopher, Neil Edward, present Guntersville, Ala., to Medical Arts Center, Guntersville, Ala., 35976.

Speir, Ross C., Jr., present Guntersville, Ala., to Medical Arts Center, Guntersville, Ala., 35976.

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Jones, Frederick B., present Mobile, Ala., to 1557 Springhill Avenue, Mobile, Ala., 36604.

Lester, Richard P., present Mobile, Ala., to 1707 Springhill Avenue, Mobile, Ala., 36604.

March, George M., present Plateau, Ala., to 147 Telegraph Road, Plateau, Ala., 36610.

Mitchell, George J., present Mobile, Ala., to 1556 Springhill Avenue, Mobile, Ala., 36604.

North, William E., present Prichard, Ala., to 167 Meaher Street, Prichard, Ala., 36610.

O'Neal, Winston, present Mobile, Ala., to 1904 Dauphin Island Parkway, Mobile, Ala., 36605.

Polewoda, Woodrow W., present Prichard, Ala., to 230 South Wilson Avenue, Prichard, Ala., 36610.

Reynolds, Hugh, present Mobile, Ala., to 1653 Springhill Avenue, Mobile, Ala., 36604.

Sewell, James W., present Mobile, Ala., to 1367 Government Street, Mobile, Ala., 36604.

Sullivan, Daniel F., present Mobile, Ala., to 4464 Old Shell Road, Mobile, Ala., 36604.

Sullivan, Francis W., present Mobile, Ala., to 4464 Old Shell Road, Mobile, Ala., 36604.

Terry, Charles D., present Mobile, Ala., to 726 Dauphin Island Parkway, Mobile, Ala., 36606.

Traveis, Leonard F., present Mobile, Ala., to 1557 Springhill Avenue, Mobile, Ala., 36604.

Montgomery County

Barnes, Z. B., Jr., present Montgomery, Ala., to 1235 Forest Avenue, Montgomery, Ala., 36106.

Bograd, Nathan, present Montgomery, Ala., to 3015 Atlanta Highway, Montgomery, Ala., 36109.

Lightfoot, Philip M., Jr., present Montgomery, Ala., to 1235 Forest Avenue, Montgomery, Ala., 36106.

Page, Thomas Neilson, present Montgomery, Ala., to State Office Building, Montgomery, Ala., 36104.

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Hansberry, George William, present Decatur, Ala., to 445 Grant Street, Decatur, Ala., 35601.

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Primm, Chester B., present Roanoke, Ala., to 526 Price Street, Roanoke, Ala., 36274.

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and protects intestinal mucosa

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.



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Each fluid ounce of creamy white suspension contains:

*Paregoric (equivalent) (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.

warning: may be habit forming

Pectin (2½ grains) 162 mg.
Kaolin (specially purified) (85 grains) 5.5 Gm.
(alcohol 0.69%)

Usual Children's Dose: One or two teaspoonfuls three times daily.



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Senator Roland Cooper, Chairman of the Senate Health Committee meets with the Board of Censors. Presiding at the May 17 meeting was Dr. John M. Chenault, Chairman of the Board.



Board of Trustees officers listening to reports of the Board of Censors are Doctors O. Emfinger, Union Springs; E. Bryce Robinson, Jr., President of MASA, Birmingham; and Emit L. McCafferty, President-Elect, Mobile.



Doctors John W. Davis, Montgomery; Everett L. Strandell, Brewton; James P. Collier, Tuscaloosa; M. Vaun Adams, Mobile; and Paul W. Burleson, Birmingham shed their coats to discuss Association



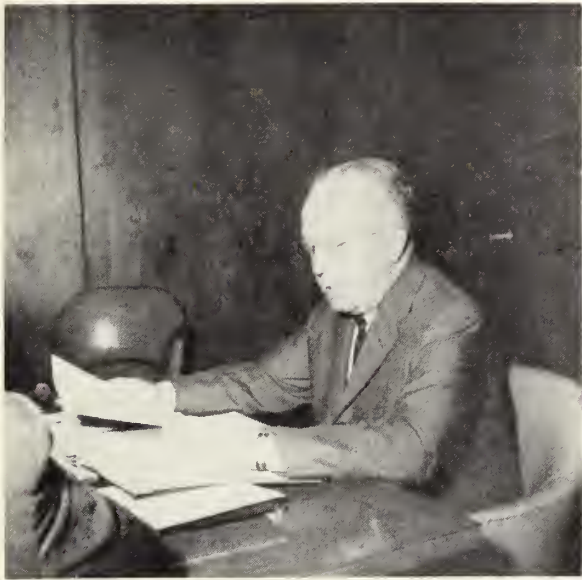
business. Dr. John Davis, new member to the board, was welcomed by the chairman and board members. Really the air conditioner went off but was back in working order shortly thereafter.



Attorney Bernard Sykes of the Attorney Generals Office and Dr. Hugh E. Gray, Anniston.



"That's something to Consider" seems to be the expression of Dr. W. S. Littlejohn, Birmingham, and Dr. Luther L. Hill, Montgomery.



Dr. E. Bryce Robinson began his official duties as MASA president at the May 7, 1967 Board of Trustees meeting.



Left to right Board of Trustees Members: Doctors Paul W. Burleson, Emit L. McCafferty, Henry H. Hodo, Jr., Selma, and Sidney J. Williams, Livingston. Dr. Williams was appointed to the Board at the 1967 Annual Session.



Virginia Ceceile Harrison, 18, Tuscaloosa, Alabama, high school senior, was presented one of the AMA's "Award of Merit" Citations by Dr. Dwight L. Wilbur, a member of the AMA Board of Trustees and master of ceremonies at the Health Awards Banquet during the 18th International Science Fair May 10-13 in San Francisco. Virginia won for her exhibit on "Possible Chemical Basis of Learning" from among 425 finalists from 229 regional science fairs.



Meet Mr. John Frazier of the Central Office Staff. Mr. Frazier is the energetic young man that prints and mails many important publications, such as the Journal, The Alabama MD, minutes, etc., for your information. He is also in charge of maintaining the office building and equipment. No small task by any means.

Wounds, abscess, cellulitis.



...and the complications of staph.

Staph reliably controlled with specific therapy

From time of birth, the child is exposed to a whole range of potential staph infections: wounds; secondarily infected dermatoses; primary lesions, such as deep impetigo (ecthyma), boils and felons; and more serious conditions such as osteomyelitis, staph pneumonia and staph meningitis.

Bactericidal

Hardly a staph organism can resist the bactericidal action of Prostaphlin® (sodium oxacillin), as shown by a 34-month *in vitro* study. Of all staph isolates tested, 99.5% were sensitive to oxacillin.¹

Clinically Proven

There is a high correlation between these *in vitro* findings and clinical results. Of 610 patients treated with Prostaphlin (sodium oxacillin), 89.8% were reported cured or improved, including those with staph infections resistant to penicillin G.² And since resistance does not appear to develop *in vivo*, therapy with oxacillin can be extended when necessary.

Outstanding Safety Record

Besides being staph-specific and rapidly absorbed—Prostaphlin (sodium oxacillin) has established an outstanding record of safety during five years of widespread clinical use. Continuous high blood levels of oxacillin have not produced toxic effects on kidney function, assuring a significant margin of safety. However, as with all penicillins, the possibility of allergic response should be considered.

Capsules, Oral Suspension and Injectable

Prostaphlin (sodium oxacillin) is available in three flexible dosage forms to suit the age of the patient and severity of infection—an oral solution for pediatric use, capsules, and multi-dose vials for injection.

PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q. 4 or q. 6 h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q. 4 or q. 6 h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY 8:12.16

References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N.Y. 2. Data on file, Bristol Laboratories.

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AMA's 116th Annual Convention

The American Medical Association's 116th Annual Convention is expected to draw nearly 32,000 people to Atlantic City, N. J., June 18-22.

General and specialized sessions, 300 scientific exhibits, and displays of the latest in drugs, equipment and services will be presented in Atlantic City's huge Convention Hall on the boardwalk, the nation's largest complete convention hall. This will be the 10th time since 1935 that the AMA has met in Atlantic City.

Four general scientific meetings will explore Backache, Healing, Patient Care and Sex. In addition, 22 individualized sections will be held on such subjects as Disaster Medical Care, Nuclear Medicine, and Maxillo-Facial Surgery.

Five closed-circuit color television programs will be fed to Convention Hall from a Philadelphia hospital in cooperation with the University of Pennsylvania School of Medicine. A program of 40 to 50 outstanding medical motion pictures is also scheduled.

A panel discussion on "The Doctor's Dilemma in the World of Changing Morals." will be held on the first night of the convention. Leading physicians and theologians will discuss The Unwed Mother, Contraceptives and the Coed, Abortion, and Alcoholism.

Talladega—Dr. J. D. Rayfield (H. O.), Sylacauga 35150; Talladega 35160

Tallapoosa—Dr. W. J. Donald (H. O.), Dadeville 36853

Tuscaloosa—Dr. W. C. Baty, Jr., (H. O.), 607 10th St., East, Tuscaloosa 35401

Walker—Dr. S. D. Waldrop (H. O.), Box 686, Jasper 35501

Washington—Dr. W. J. Donald (H. O.), Chatom 36518

Wilcox—Dr. J. S. Ross (H. O.), Box 27, Camden 36726

Winston—Dr. S. D. Waldrop (H. O.), Double Springs 35553

PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. For further information: write Mr. Emmett Wyatt, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104 or Phone 263-6441.

Locations Wanted

Allergy-Pediatric Allergy—

Age 34; married; Washington University 1960; certified American Board; military obligation completed. Seeking solo, group, associate or institutional practice. Available July 1967. LW-105

Anesthesiology—

Age 53; Loma Linda University 1941; Board eligible; seeking solo, associate, or institutional practice. Available immediately.

General Surgery—

Age 52; Loma Linda University 1940; certified American Board; seeking solo, industrial, associate or institutional practice. Available immediately. (Husband and Wife—Surgeon and Anesthesiologist) LW-106

Dermatology (Institutional)—

Age 49; single; Bowman Gray 1950; certified American Board. Available September 1967. LW-107

General Practice—

Age 29; married; Medical College of Alabama 1962; completing military obligation; seeking location in town of 14,000 population or less. LW-108

General Practice—

Age 26; single; Medical College of Alabama 1966; wishes to establish initial practice, probably in area to qualify for fulfillment of scholarship plan. Available July 1967. LW-109

General Practice—

Age 30; married; Medical College of Alabama 1962; seeking associate practice. Available immediately. LW-110

Internal Medicine—

Age 34; married; George Washington University 1959; Certified American Board; seeking group, industrial, associate, or teaching position. Available July 1967. LW-111

Internal Medicine—

Age 31; single; University of Miami 1962; National Board; seeking institutional, industrial, associate or administrative position. Available July 1967. LW-112

Internal Medicine/Hematology (Academic)—

Age 34; married; Stanford 1958; Board eligible; seeking institutional, or academic position. Available September 1967. LW-113

Neurology—

Age 31; University of Miami 1963; Board eligible; seeking industrial practice. Available August 1967. LW-114

Pediatrics—(Public Health or Institutional)—

Age 38; married; Virginia 1954; Certified American Board. Available July 1967. LW-115

Surgery (General or Plastic)—

Age 39; married; Medical College of Alabama 1955; Certified American Board; seeking associate practice. Available July 1967. LW-116

Surgery-General Practice—

Age 43; married; University of Louisville 1947; Certified American Board; seeking group practice. Available immediately. LW-117

Surgery (General)—

Age 50; married; Jefferson 1943; Certified American Board; seeking solo or industrial practice. Available immediately. LW-118

Urology—

Age 33; married; Jefferson 1960; seeking group or associate practice. Available July 1967. LW-119



Physicians Wanted

General Practitioner—

For town in Northeast Alabama, approximately 1,000 population in trade area of 10,000 population. Town has been without a physician for a year. Clinic available rent free and arrangements will be made for expansion and equipment. Hospital being planned at nearby location. Large industry which physician might serve as company physician. Recreational advantages for water sports. Churches and schools. PW-68

General Practitioner—

For town of approximately 10,000 population in South Alabama. One of the physicians died recently. Office space and equipment available. PW-69

General Practitioner—

For town in Southwest Alabama, approximately 1,000 population in trade area of approximately 10,000 population. Arrangements available for office and equipment. PW-70

General Practitioner—

For town of less than 5,000 population in South-central Alabama. One of the two physicians died recently. Office and equipment available. PW-71

General Practitioner—

Needed for town of approximately 1,000 population in North-central Alabama in trade area of 12,000 population. 100-bed hospital in adjoining city. PW-72

PHYSICIANS WANTED

General Practitioner—

For town of approximately 1,000 population in Northwest Alabama, near Tennessee Valley waterways. New 15-bed clinic available. Centrally located near metropolitan areas. Extensive industrial developments. PW-73

General Practitioner—

For town of 2,000 population combined with nearby town of 1,000 in trade area of approximately 10,000 population in central Alabama. Industrial developments, farming, and fruit industries. Hospitals 9 miles. Clinic available rent free. PW-74

General Practitioner—

For town of 2,500 population in Northeast Alabama located near large lake and recreational areas. Hill-Burton hospital and nursing home in town. Possibility of partnership practice. PW-75

General Practitioner—

For town with 1,000 population in trade area of 5,000 in Southeast Alabama. Nearest large city with population of 50,000 is 55 miles. New clinic available rent free. No physicians in the town. Hospitals in surrounding towns within 30 miles. Several churches and schools. PW-76

General Practitioner—

Town with 2,350 population in East-central Alabama. Clinic available. Excellent recreational facilities near lakes. PW-77

General Practitioners (one or two)—

Town with 10,000 population in county of 40,000 population located in scenic mountainous section of Northeast Alabama. Office space and equipment available from physician who wishes to retire. Hill-Burton hospital-nursing home. Expanding industries in top agricultural area. PW-78

General Practitioner—

For town of 1,000 plus population in 10,000 population center in Northeast Alabama. Nearest city with population of 150,000 is a distance of 55 miles. Town offers to build a clinic or office and provide housing. Agriculture and textile industries. Several churches and one school. PW-79

General Practitioner-Surgeon—

For two towns with combined population of approximately 5,000 in West Alabama seeking one or more physicians. Possibility of 4 additional physicians needed in the county. A hospital is located in each town and plans are underway for expansion of facilities. Office space available. Nearest city with 50,000 population is 30 miles. PW-80

General Practitioner-Surgeon—

To be associated with established surgeon in four-man clinic in town of 7,500 population in 25,000 population center in Northwest Alabama. 75-bed accredited hospital. PW-81

Obstetrician-Gynecologist—

For partnership. Board eligible or Board qualified. In city of 35,000 population located in Northeast Alabama. PW-82

Urologist—

Needed in town of 35,000 population in Southeast Alabama in population center of 60,000 located less than 100 miles from the Gulf. One urologist in town at present. Two hospitals with combined 130-bed capacity, which would offer privileges to a Board qualified physician. Office and equipment available. PW-83

Pediatrician—

One or two, and Internist needed in East Alabama. Adjoining cities of combined population of 40,000, with 60,000 population in the county. Office space available. Accredited hospital. PW-84



MURFREESBORO — VACANCIES:
STAFF PHYSICIANS for 1275 bed Neuropsychiatric Hospital, including 350 general medical and geriatric. Modern facilities for diagnosis and treatment of mental illness. Salary \$15,106 to \$23,013 depending on qualifications; fringe benefits; cost of moving to Murfreesboro will be paid by Veterans Administration; visit here for evaluation can be arranged at our expense. Excellent educational opportunities for students in this area. Contact Director, Veterans Administration Hospital, Murfreesboro, Tennessee.



High School Coaches Cautioned

● The team orthopedic surgeon at Brown University advised secondary and high school coaches and physical education teachers to study their responsibilities in supervising contact sports.

Dr. G. Edward Crane said that it is practically impossible for schools to have a physician present at all practice sessions, however desirable. A doctor must be, and with few exceptions evidently is, present at actual contests. This leaves many practice periods, primarily football scrimmages, where first aid for an injured player must be administered by the coach. He must have a basic knowledge of first aid, which injuries are major and which minor, and an ability to recognize and direct treatment of those that occur. Dr. Crane feels that coaches and physical education teachers are considerably better trained in first aid than in the past, but that many still lack proper knowledge.

Dr. Crane pointed out that the coaches' interests are in jeopardy as well as the athlete's safety in case of improper immediate care of an injury. He cited a lawsuit brought against a high school and its coach by parents of a player who was allowed to walk off the football field with a dislocated shoulder. Dr. Crane said the coach's judgment had apparently caused the player no harm, but differences of opinion can arise in such matters.

A stretcher is essential at practices, scrimmages and games for removal of a player who might be further injured by walking. At Brown all head injuries, most leg injuries and some back injuries call for use of the stretcher despite the player's protest. Dislocated shoulders and arm or collarbone injuries can generally be "walked," Dr. Crane said. The printed programs at Brown games explain this policy, to reassure parents and friends that a player removed on a stretcher is not necessarily seriously hurt.

Dr. Crane said that even small communities generally have an ambulance and a well-trained rescue squad on call. If an injury oc-

curs in a practice and a physician is not immediately available, the coach should not hesitate to have the player taken to the hospital emergency room for medical evaluation.

"I do not believe that anybody in the emergency room would object," Dr. Crane said, "to the bringing in of a player who has been hurt but not seriously hurt, rather than to have him come in three or four hours later with a serious injury."

Dr. Crane said splints should be available on the field to immobilize an injured arm or leg. This may be simply a pillow and three flat boards tied together, or canvas reinforced with slats. The newer plastic inflatable splints are "extremely advantageous," as they give excellent immobilization, permit x-ray without removal of the splint, and protect the injury until the surgeon decides whether or not to cast it.

Dr. Crane advised coaches not to be misled by athletes, particularly on the crew squad, who believe they will stay cool during hot weather practice by soaking their clothing in water. A soggy sweat-suit interferes with natural cooling by sweating, and light, dry clothing is far better. On hot, muggy days a change of dry clothing and a rest break in the one to one-and-a-quarter hour practice are advisable.

No Smoking

The "No Smoking" edict may extend to religious incense, as well as cigarettes. Dr. S. D. Sturton and associates of the Hong Kong Sanatorium and Hospital, Hong Kong, found a much higher proportion of habitual "joss stick" — Buddhist incense — burners among their patients with cancer of the nose and throat than among patients with other malignant diseases. — *Cancer*, November, 1966.

Breakfast, Alas!

The traditional hearty breakfast is out. All that remains as a reminder of past glory is fruit and the morning paper habitually glanced at between bites and sips, according to an editorial in a recent issue of *J. A. M. A.*

Once tables groaned with cream-drenched cereal, buttered toast, eggs, bacon or ham and coffee. The picture has undergone drastic changes. These began more than a decade ago when medical evidence pointed to an association between fat consumption and mortality from heart disease. The changes continued with each new "discovery" and various components of the abundant breakfast disappeared one by one.

First to go was the egg, its color betraying the offending cholesterol. Next went the fatty bacon and lipid-laden milk products,

leaving behind the drabness of dry toast and black coffee. Sugar then followed suit when studies suggested that dietary sugar is a major causative factor in the rise of blood lipid level and the increased incidence of coronary heart disease.

Now sugarless and creamless coffee appears to be on the way out. A positive association between coffee intake and the incidence of heart disease has been reported. Even the customary after-meal cigarette is a coronary suspect.

Will the paper be next to go? Emotional stress is high on the list of coronary culprits, so front page news and stock market reports should be kept out of sight if the newspaper is still to be read with impunity.



Vacation trip....

Motion sickness?



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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 36

June, 1967

No. 12

Clinical Oxygen And Patient Relationship

Donald S. Tysinger, Jr., M. D.

1. BAROMETRIC PRESSURE:

The gaseous envelope or atmosphere is held to the earth by the pull of gravity on the molecules of the air. Since the pull of gravity determines weight, the pressure of this gas is equal to the weight of a column of air from any point "all the way up."

In scientific research and clinical medicine, this pressure or weight is expressed usually as millimeters of mercury and is known as barometric pressure.

The barometric pressure depends among other things on the elevation of the point at which it is measured. The average barometric pressure at sea level is 760 mmHg. The pressure on a mountain is lower than the pressure at sea level for the column of air is shorter. For every ten feet of altitude there is a decrease of 0.25 mmHg pressure. 760 mmHg. pressure, one column of atmosphere at sea level is known as one atmosphere pressure. If we develop a pressure in gas of 1520 mmHg., then it is equal to two atmospheres of hyperbarometric pressure or hyperbaric. If we go up to 5,000 feet, we find that the pressure is only 0.8 of an atmosphere. At 15,000 feet, we find that the

pressure is only 0.6 of an atmosphere. The air column at any point on earth is referred to as ambient barometric pressure for that spot. Ambient means at that level or that actual barometric pressure acting on that spot.

Air is composed primarily of nitrogen, by volume a fraction over 79 per cent, with argon, and other inert gas; oxygen a fraction less than 21 per cent; carbon dioxide about 0.04 per cent, water vapor, natural and artificial pollutants, dust, gas and other vapors.

The gases are under ambient pressures. Composition remains approximately the same for any altitude in the troposphere. The pressures of individual gases, referred to as the "partial pressures" decrease with altitude. For example, at sea level with a barometric pressure of 760 mmHg., oxygen composing 20.9 per cent of the atmosphere has a partial pressure of 159 mmHg. However, at 20,000 feet where the total barometric pressure is only 380 mmHg., the partial pressure of oxygen 20.9 per cent would be only 79.5 mmHg. The principal medical interest is in the oxygen pressure as this pressure of oxygen is the force that causes oxygen exchange in the lungs.

Dr. Tysinger is the Medical Director of the Alabama Chronic Respiratory Disease Project.

2. OXYGEN

We learned in section one that air is 20.9 per cent oxygen at sea level with 760 mmHg. barometric pressure and that the pressure of oxygen in air at sea level is approximately 159 mmHg. Since oxygen is also measured as volume per cent, this 159 mmHg. pressure is 20.9 ml. of oxygen per 100 ml. of air or 20.9 volume per cent, (ml. and volumes per cent being the same.). This would be 209 ml. of oxygen per liter of air breathed.

This air with 209 ml. of oxygen per liter at 159 mmHg. pressure must be mixed (on breathing) with the air remaining in the lungs and bronchial tubes at the end of each breath, (the functional residual volume). As this air is mixed with the functional residual volume it is warmed up to 37 degrees centigrade and 100 per cent saturated with water. This air is low in oxygen due to gas exchange and high in carbon dioxide. The air as it mixes with the alveolar air is saturated with water. This amounts to 47 mmHg. water vapor as part of the volume or 6.2 per cent. (This is the water vapor of air 100 per cent saturated at 37 per cent centigrade or 98.6 degrees fahrenheit). Since water vapor pressure changes the volume, this 47 mmHg. or 6.2 per cent must be subtracted from the barometric pressure which in the alveolus is still 760 mmHg. minus 47 mmHg. with a resultant 713 mmHg. pressure remaining for oxygen, nitrogen and carbon dioxide. The carbon dioxide in the alveolus equilibrates with the arterial carbon dioxide which is usually 40 mmHg. pressure or 5.6 per cent. Nitrogen which is taken into the lungs fully at 79. per cent is not utilized by the body or blood stream but is in equilibrium at 562 mmHg. nitrogen pressure in the alveolus. The remaining pressure is that of oxygen at the alveolar level. Therefore, we have our 760 mmHg. pressure minus 47 mmHg. for water, minus 40 mmHg. for carbon dioxide, and minus 562 mmHg. for nitrogen, which leaves 111 mmHg. oxygen pressure at the alveolar level or 14 or 15 per cent. This, then is the

composition of the air which equilibrates with blood in the alveolus of the lung.

In breathing, the amount of oxygen taken up by the blood stream is usually greater in volume than the carbon dioxide put back into the alveolus in the order of 250 ml. of oxygen uptake and only 200 ml. of carbon dioxide transferred to the alveolus. This in effect increases the nitrogen percentage from 79.0 to the alveolar nitrogen concentration of 81 per cent or a pressure of 570 mmHg. Now at this increased level the effect is an oxygen pressure actually of 103 mmHg. pressure at the alveolar level or 14 per cent. Thus alveolar air is a total of 760 mmHg. pressure, 47 mmHg. of water, 40 mmHg. of carbon dioxide, 570 mmHg. of nitrogen and 103 mmHg. of oxygen.

3. ALVEOLAR BLOOD GAS EXCHANGE

In the blood one gram of hemoglobin will carry 1.34 ml. or volumes per cent of oxygen. No matter what the oxygen pressure, one gram of hemoglobin can carry only 1.34 ml. or volumes per cent of oxygen. The plasma portion of blood is capable of carrying 0.003 ml. per 100 ml. of plasma per one mmHg. oxygen pressure. To carry one ml. of oxygen per 100 ml in the plasma, then, a pressure of oxygen of 339 mmHg. would have to be present in the air of the alveolus.

After equilibration, there is usually a 4 mm difference between the alveolar oxygen pressure of 103 mmHg. and oxygen pressure in the blood. The pressure of oxygen in the blood would be 99 mmHg. This will cause 0.297 ml. per 100 cc or volumes per cent of oxygen to be carried physically dissolved in the plasma and 100 per cent saturation of the hemoglobin.

In the blood stream, oxygen is measured as the pressure of oxygen in the blood stream or PO_2 in mmHg., also as volumes per cent or milliter of oxygen in the blood, and of per cent saturation, which is the amount of oxygen carried by the hemoglobin and

plasma in proportion to all it could carry. As pH goes up (blood gets more alkaline) it takes a higher alveolar oxygen pressure to cause the same degree of oxygen saturation of the hemoglobin. As pH goes down (blood gets more acid) hemoglobin will be more saturated at lower alveolar oxygen pressures. As temperature goes up, it takes a higher alveolar oxygen pressure to saturate hemoglobin to the same degree, and as temperature goes down in hypothermia it takes a lower oxygen pressure to saturate the blood fully. As carbon dioxide levels go up it causes a decrease in the oxygen carrying capacity of the hemoglobin, as carbon dioxide tension goes down it decreases the release of oxygen at the tissue level for tissue use.

4. THE EFFECT OF HEMOGLOBIN ON OXYGEN CARRYING CAPACITY

For the purpose of presentation, assume in the following section a blood pH of 7.4 and an arterial and alveolar PCO_2 pressure of 40 mmHg. at body temperature of 37 degrees centigrade. With these standard conditions let us see how the hemoglobin and plasma handle oxygen at 760 mmHg. B. P. with 47 mmHg. saturation with water, PCO_2 40 mmHg. and alveolar nitrogen, 570 mmHg. and alveolar oxygen 103 mmHg. First: with 15 grams of hemoglobin, next with 10 grams of hemoglobin, and then with 5 grams hemoglobin. With all three of these hemoglobin concentrations we will be carrying physically dissolved in the plasma 0.297 ml. or volumes per cent of oxygen. The blood at the alveolar level, (this includes plasma and hemoglobin) will be 100 per cent saturated and in all three the arterial oxygen tension or PO_2 will be 99 mmHg. At 15 grams hemoglobin, the hemoglobin will carry 20 ml. or volumes per cent of oxygen. At 10 grams hemoglobin, it will carry 13.4 ml. or volumes per cent of oxygen. At 5 grams hemoglobin, it will carry 6.7 ml. or volumes per cent oxygen. Increasing the pressure of oxygen cannot cause any increase in the saturation of hemoglobin and can only cause

.003 ml. or volumes per cent per mmHg. of oxygen pressure to be carried, physically dissolved in the plasma. If we use 100 per cent oxygen at 760 mmHg. pressure there will still be 47 mmHg. water vapor pressure, 40 mmHg. carbon dioxide, which leaves 760-87 or 673 mmHg. pressure in the alveolus assuming if we can wash all the nitrogen out. The only increase in oxygen carrying capacity will be in the amount that this increase in pressure will physically dissolve in the plasma. At this oxygen level, there is now a 35 mm. gradient or difference after equilibration between the alveolar oxygen tension and the oxygen tension or PO_2 in the blood stream which means we actually have 638 mmHg. oxygen pressure PO_2 maximum. To begin with we had 99 mm. pressure so our actual increase in pressure would be 539 mmHg. pressure. Since this can only increase the physically dissolved oxygen we find out this would cause an increase of 1.6 ml. or volumes per cent more oxygen than the patient was getting breathing normal room air.

In other words, if the hemoglobin is being fully oxygenated there is little to be gained by giving the patient oxygen. He is more likely to need ventilating.

It should be pointed out the blood normally going through the lungs and the alveolar capillary bed is 100 per cent saturated with oxygen and equilibrated with carbon dioxide under our theoretically existing conditions. However, there is a small amount of bronchial artery blood supply that does drain into the pulmonary veins not completely oxygenated and truly venous in nature. There is in the normal individual some small amount of blood traversing the pulmonary artery capillary bed without being oxygenated and there is the blood that enters the left ventricle from the coronary artery through the left ventricular wall from the myocardium which is not oxygenated. Therefore, in the left ventricle, in the normal individual, there is a readjustment of oxygen saturation with this venous blood so that as

the blood leaves in the arch of the aorta to the body it is 95 to 97 per cent saturated. In arterial blood at pH of 7.4, PCO_2 of 40 mm. of mercury and 95 per cent saturated with oxygen, the PO_2 would then be 80 to 85 mmHg. pressure or at 15 grams hemoglobin 19 ml. or volumes per cent oxygen carried.

The alveolar PO_2 pressure determines the per cent saturation of oxygen in the blood. If we now can picture obstructive lung disease with difficulty in the removal of carbon dioxide from the alveolar level and instead of 40 mmHg. alveolar PCO_2 we now have 70 mmHg. alveolar PCO_2 then we still have our 760 mmHg. barometric pressure. We still have our 47 mm. water vapor pressure. There is still 570 mm. nitrogen pressure and this 30 mmHg. increases in CO_2 pressure can only impinge on the 103 mmHg. oxygen pressure. Therefore, by this increase from 40 to 70 mmHg. PCO_2 drops alveolar oxygen saturation to 73 mmHg. pressure. Our conditions holding as we have previously set, this would still cause the hemoglobin and plasma to be 92 per cent saturated with oxygen. Now to review: At 95 per cent saturation (which is the normal) at 15 grams we have 19 ml. of volumes per cent, at 10 grams we have 12.8 ml. or volumes per cent, and at 5 grams 6.4 ml. or volumes per cent. With the drop in alveolar oxygen tension to 73 mmHg. we will have arterial pressure of 69 mmHg.; however, our hemoglobin and plasma will still be 92 per cent saturated. Therefore, for 15 grams of hemoglobin, we will only drop 19 ml. or volumes per cent to 18.5 ml. or volumes per cent; or 0.5 ml. of oxygen. At 10 grams instead of our 12.8 ml. or volumes per cent, it will drop to 12.4 ml. or volumes per cent or only 0.4 ml. or volumes per cent oxygen lower. At 5 grams hemoglobin instead of 6.4 ml. or volumes per cent it will be 6.2 ml. or volumes per cent, or only 0.2 ml. or volumes per cent difference in 73 over 103 mmHg. alveolar oxygen pressure. The amount carried in the plasma would drop from 0.282 ml. or volumes per cent to 0.274 ml. or volumes per cent, at 92

per cent saturation. Going over the above it should now be understood that the difference in room air with a PO_2 of 70 mmHg. at the alveolar level and breathing 100 per cent oxygen will not increase the oxygen carrying capacity of blood more than 2 ml. or 2 volumes per cent, this points out the reason oxygen is frequently not the basic need unless there is significant oxygen desaturation as indicated by cyanosis or 5 grams of reduced hemoglobin that can be improved by the administration of oxygen. We worry too much about oxygenation and too little about ventilation.

To look at oxygen carrying capacity in a different light, the difference between 70 mmHg. arterial oxygen pressure or 92 per cent saturated and 100 per cent oxygen, would be slightly less than 2 ml. or volumes per cent per 100 cc of blood or 20 ml. per liter of blood. The average cardiac output is about 5 liters per minute. This would be at most 100 ml. of oxygen per minute. In our blood at 15 grams hemoglobin based on a 5 liter cardiac output per minute, we are carrying 1000 ml. of oxygen per minute. This would only increase it to 1,100 ml. at the most. At 10 grams hemoglobin we are carrying 670 ml. per minute and might increase it to 770 ml. per minute. At 5 grams hemoglobin we are carrying 335 ml. per minute at a 5 liter output and we may increase it to 435 ml. So we can see that in the situation in which hemoglobin is being oxygenated the difference between 70 mmHg. of alveolar oxygen tension and 100 per cent oxygen does not make a great deal of difference. In the anemic stages increase in hemoglobin is a far better means of increasing transport. Actually cardiac output increases, by increasing stroke volumes, and rates. So the oxygen carrying capacity is compensated for.

5. WHERE OXYGEN IS INDICATED

Oxygen is a very rapidly diffusible gas. It disperses in a mixture of gases extremely rapidly. We know oxygen at 2 or 3 liters per minute, in paralyzed dogs can with diffusion

respiration maintain arterial oxygen saturation. The dog in such a state suffers not from a lack of oxygen but from a rapidly developing respiratory acidosis. Oxygen on the other hand is not very soluble in liquids, therefore, in states in which there is a liquid or abnormal cellular barrier between the alveolar space and the capillary blood, the reduction in oxygen transfer from the alveolus to the capillary is very great. In this type situation, arterial blood is desaturated on room air. In these situations an increase partial pressure of oxygen at the alveolar level does aid immensely in fully saturating the desaturated pulmonary capillary blood. In such situations, the smallest pressure possible to saturate arterial blood should be used. These situations are usually associated with pneumonia, heart failure, infections of the lung, etc.

If 100 per cent oxygen is used over a long period of time, it can have quite deleterious effects. In the lungs it causes stasis of lymph flow. Lymph drainage is a major factor in fighting lung infection and clearing the lungs of pulmonary edema. One hundred per cent oxygen paralyzes the tracheobronchial mucous escalator by paralyzing ciliary action of the bronchial lining cells and causing thickening of the secretions of the lungs. This continued use of oxygen causes alveolar capillary membrane disease which is an extreme hazard. Breathing high concentrations of oxygen also causes cerebral vasospasm with a tendency to increase the lactic acid level of cerebral metabolism and with cerebral vasoconstriction lead to euphoria, disorientation, possible permanent brain damage and an increase output of antidiuretic hormone. Also, if in the lungs there is an obstruction present, and in the process of breathing, trapping is occurring oxygen is behind it. The oxygen is rapidly absorbed leaving atelectasis behind the obstruction. Once this type of atelectasis has occurred it is quite difficult to re-expand this area. Where only partial pressures of oxygen are given with nitrogen or at room air, nitrogen is not absorbed and tends to

keep the alveolar spaces open behind the trapped areas. Again for emphasis, rarely is oxygenation the patient's need. Usually ventilation is the patient's need. A well ventilated patient will usually be satisfactorily oxygenated.

Cyanosis is the sign of oxygen need. If a patient is not cyanotic, then he probably needs ventilating not oxygen. Not all cases of cyanosis are due to pulmonary disease with alveolar capillary oxygen diffusion problems. The causes of cyanosis are: (1) pulmonary membrane disease (2) peripheral blood stasis (3) extra pulmonary right to left shunts (4) intra pulmonary right to left shunts (blood passing through non ventilated lungs). (5) Polycythemia (6) Methemoglobinemia (7) Alveolar hypoventilation with marked hypercapnea (8) A combination of the above. Oxygen is only effective in numbers 1, 5, it is partially effective in 3, 7, and 8.

6. METHODS OF GIVING OXYGEN

A. General Principles:

Oxygen is a dry gas. It should be completely humidified before it enters the tracheobronchial tree. Dry oxygen thickens tracheobronchial secretions. This trouble occurs in the larger bronchi, not in the peripheral areas where fluids are, therefore is not of help in drying out wet lungs. People with obstructive disease, when in trouble, have more of a flow rate problem as a rule than an oxygenating problem. Resistance to air flow through a tube depends on (1) the pressure difference at the two ends (2) the size of the tubes (3) the rate of flow of gas through the tubes. If the rate of flow is high enough and pressure difference is great enough, turbulence due to friction can obstruct the tube. In normal breathing alveolar pressures vary from minus 3 cm H₂O to plus 3 cm H₂O. At the other end the mouth pressure is 0 cm H₂O. The flow rate is 2-3 L/min. People with obstructive lung disease fighting for breath (1) have narrowed tubes (2) are rapidly building up pressures of minus 40 cm H₂O to plus 40 cm H₂O (3) causing a very high flow rate causing tur-

bulent obstruction of the bronchi and further reducing breathing. To correct this situation, slower and deeper breathing at lower pressures developed at slower rates corrects the breathing problem and gives much better exchange. The same problem occurs with IPPB machines that are not designed so flow rate and pressure can be separately controlled. Low flow rates must be used, or high flow and added pressures will cause premature recycling and even further reduction in effective ventilation.

B. Oxygen Helium Mixtures:

Oxygen diffuses as well from air as it does from such mixtures. Helium is difficult to humidify because it carries little water, being so light. Usually sedation and/or muscle paralyzers and controlled respirations are more effective.

C. Nasal Catheters:

Up to 50 per cent oxygen concentration can be obtained using 6 to 12 L/min. flow. However even with proper placement of the catheter this puts a lot of oxygen into the stomach and the distention causes problems all its own. Proper placement is so the catheter just does not show in the back of the throat. This form is the hardest to humidify. This causes thick secretions. The patient must breath through the mouth causing further drying problems. Nasal catheters should be lubricated only with water.

At a 2 L/min. flow 30 per cent oxygen concentration or lower can be obtained that is usually safe in face of elevated PCO_2 .

D. Face Masks:

Up to 70 per cent concentrations can be obtained with this method. Better humidification can be obtained. Here there is the possibility of rebreathing with build up of PCO_2 , if sufficient flushing of the mask is not done by high flow rates of oxygen at least 12 L/min.

E. Face Tents:

With proper humidifiers and large bore tubing at 15 L/min. high humidity and 50

per cent concentrations can be obtained. This is probably the best way to give oxygen.

F. Oxygen Tents:

Here 30 to 40 per cent concentrations can be obtained. When using a tent oxygen should be run as fast as possible. If low flow rates are used very low oxygen tensions can be obtained. The sides of the tent should be left loose to prevent CO_2 build up. Tents are more useful for air conditioning the patient, isolating the patient from visitors, and for patient psychology, than for oxygenating the patient.

G. Respirators:

Respirators are the only way to deliver 100 per cent oxygen. The principles of respirators, principles of topical pulmonary chemotherapy, physics of cohesive and adhesive forces and their manipulation, and a thorough understanding of fluid dynamics should be understood before this type of equipment is used.



"It was nothing, really . . . cut myself shaving! Now, are you ready for that delicate operation?"

Reprinted from **Nebraska Medical Journal**

Physical Aspects Of Aging

J. J. Kirschenfeld, M. D.*

Montgomery, Alabama

INTRODUCTION: Since beginning of time, man has been apprehensive about aging and has attempted vainly to stem its inexorable march. Ponce de Leon's quixotic search for the "fountain of youth" was only one phase of the perpetual search for youth; witness the booming market in hair dyes and hair restorers, wrinkle removers, rejuvenators, tonics, hormones, etc.

The Old Testament, on the other hand, places a great deal of emphasis on the capabilities and virility of its men of age. Abraham was 75 years old when the Lord asked him to leave his homeland to begin an entirely new life in the wilderness and plant the seed of a new people. The Bible informs us that Abraham was a 100 years of age when his son, Isaac was born and 175 when he died; ". . . And these are the days of the years of Abraham's life which he lived, *an hundred three score and fifteen years*. Then Abraham gave up the ghost, and died *in the good old age*, an old man, and full of years; and was gathered to his people." (Genesis: 25)

Furthermore, the Bible informs us that Isaac, in turn, lived to be "an hundred and four score years." Jacob, his son, told Pharaoh, ". . . the days of the years of my pilgrimage are an hundred and thirty years." Jacob lived on in Egypt for another 17 years and finally died at age 147. Joseph died at age 110 and Moses was 120 when he was buried on the mountain before delivering the Israelites to the "Promised Land"; "Moses was an hundred and twenty years old when he died; *his eyes were not dim or his natural forces abated*." (Deuteronomy: 34)

How remarkable! A man of 120 with good eye sight and good strength!

It is indeed difficult to understand how these desert wanderers, exposed as they were to the elements, disease, capricious food and water supply, wild animals and fierce enemies were able to survive to such ripe old ages, with strength and senses undiminished, when even in the best of circumstances, in an affluent and well-protected environment, the average age at death today is in the early 70's. Today it is rare indeed to find an individual of 90; the individual of 100 years is a rare curiosity indeed.

What has transpired during these 20 plus centuries to shorten the life span, if indeed it has been shortened?

We have no way of ascertaining the *average life span* of biblical days. We do know that since the era of recordable vital statistics began that the average life span has increased due to better control of environment, food supply and disease. For example the average life span during the 19th century was 45 (the many dying in childhood and childbirth balanced those living into old age) while the present day life span is approximately 70; the average child born in the 19th century could expect to live to age 45 while a child born today can expect to live to age 70. Yet, this is a remarkable fact, once the individual has passed middle age and has avoided the infectious and congenital diseases, his longevity today is very little better than that of 100 years ago.

We thus have the anomalous situation of more of us living past middle age and into old age without, at the same time, living any longer than the fewer fortunate ones throughout history.

The answer to this conundrum is not at hand. In fact, in my talk today, I shall be

*Practicing Internist and Clinical Associate Professor Medicine, University of Alabama Medical College. Committee on Aging and the Indigent, Medical Association of the State of Alabama.

posing questions rather than supplying answers.

Man, since antiquity has been deeply engrossed in a struggle for survival against his hostile environment and has devoted little time or thought to the later years of life. It is only with the conquest of infectious diseases and the harnessing of the environment that man has turned his attention to the problems of the aging. In times gone by the aged were unnecessary "baggage" to be disposed of when all utility was gone; many primitive societies either put the senile and the weak to death or left them behind as they moved on.

In recent years there has been a quickening of interest in aging and the aged which has engendered a much more humane approach. The full force of government, society and science has been unleashed in study and development of programs designed to elucidate the enigma of aging and to improve the lot of the aged individual. We are now beginning to come up with an affirmative answer to the psalmist who intoned; "cast me not off in the time of old age; forsake me not when my strength faileth." (Psalm: 70)

WHAT ARE THE PHYSICAL ASPECTS OF AGING?

A. *Theoretical considerations:* Does aging connote inevitable deterioration and death or is it a gradual mellowing and tempering of characteristics that can be adapted, modified and delayed? We know that aging signifies a pattern of appearance of change relative to time depending on genetic and environmental factors. We can further quantify aging by measurement of response to test situations or by the calendar. But does aging, as such, cause death or is it disease brought on by the aging which causes death?

It has been amply demonstrated that, with age, there is a gradual loss of function first, then in number of tissue cells of the body; this process is especially marked in the central nervous system and in muscle tissue

where there is an actual loss in weight and volume. Other organ systems, such as the liver and endocrines, show much less change. On the cellular level there is noted a decrease in the efficiency of the metabolic systems due to an accumulation of a series of somatic mutations which result in production of faulty messenger RNA which, in turn, results in production of poor quality cellular enzymes (template theory). The biochemical reactions upon which the cells depend for vitality tend to become more variable and less efficient. The result is an overall decline in homeostatic capacity as reflected in the nervous, hormonal and biochemical systems resulting in increased sensitivity to the environment, greater susceptibility to disease and trauma and general decline in sensory and motor function and eventually shortened survival.

Since life expectancy is a function of the rate of attrition of tissue cells as noted above, the rate of such attritions becomes the prime factor in aging; the extent of the "genetic faults" or mutations determines the rate of senescence. Much of this process is determined by hereditary or genetic factors as modified by the environment as follows:

1. Hereditary or genetic factors—Many diseases, especially cardiovascular and diabetes, are markedly affected by heredity; the rate of aging in these would appear to be largely dependent on a familial trait. The old adage to "choose your parents" is a familiar one.
2. Food supply—Within certain definable limits, excess food tends to result in obesity which in turn has been correlated with a shorter life span and more rapid aging. The chemicals used as preservatives in food and the excessive refining of food may be other factors of importance in aging.
3. Temperature—The climate might be a factor in longevity. The metabolic processes upon which life depends appears to accelerate in hot climates. The individual tends to protect against this by slowing down activities.

4. Disease—Effects of disease have a profound influence on the life span and on the overall well being of the aging individual; it may very well be the greatest factor in the loss of overall performance and death. Vascular disease involving the brain, heart, extremities and chronic pulmonary disease are especially important.

5. Radiation—Man is always exposed to some background radiation. In addition exposure is increased by medical and dental X-rays and atomic explosions. The radiated animal or insect manifests many of the signs and symptoms of accelerated aging; this is dose related and the total dose is cumulative. In addition to the accelerated aging there is increase in the incidence of malignancy and reduced resistance to disease.

B. REDUCTION IN FUNCTION WITH AGE:

It has always been assumed that there is an overall loss of function with age. This varies considerably in different individuals, some being quite alert and "fit" (Drs. Joslin and White, Churchill, Schweitzer, Baruch, etc.) while others deteriorate early.

1. Gradual loss of weight—Is this a function of age, or is it due to subtle disease?

2. Reduction in muscle mass—This can be improved by exercise. Is it possible that the sedentary existence of middle and later life result in loss of muscle tissue due to disease?

3. Reduction of brain mass—Is this a natural process or is this again due to a lack of utilization of brain tissue? The old individual expends less effort in learning and in other "mental tasks." There is reduction of competition and challenge.

4. Increased fatigue and decrease in efficiency—Older individuals frequently complain of easy fatigability and reduced efficiency. Yet, older animals (rats) can be trained by regular physical conditioning so that they can compete favorably with the younger rat. The result is less fatigue and more efficiency. Illness with its enforced

inactivity, even in the young, will result in severe fatigue. Could the lack of activity on the part of the older individual be an important factor? Are the biochemical reactions in the cells which govern their resiliency and recovery reversible within certain limits. Animal experiments would seem to indicate that this is possible.

5. Decrease in mental ability—It is an accepted axiom that the older individual learns with difficulty. It is true that the performance of mental tasks may not be as good but does this parallel the ability to learn? Theoretically, the amount of stored information should be greater, however, there is noted a reduced speed of recognition and selection of appropriate responses. In one parameter of knowledge, it has been estimated that there was an increase in stored information from a college level of 20,000 vocabulary to 40,000 at age 60 out of a possible maximum of 200,000 to 300,000 vocabulary. Experimental data would appear to indicate that mental function can be improved to some extent with training and utilization.

MAJOR CAUSE OF DEATH AND DISABILITY IN THE AGED:

It has often been said that we begin to age with birth.

A. Cardiovascular diseases:

1. Heart disease—Numerous studies have indicated that aging changes begin to occur in the coronary arteries soon after birth, especially in the male sex. The female usually ages at a slower rate, remains at least 10 to 15 years behind that of the male until onset of menopause after which the female begins to overtake the male; by age 60 the incidence of coronary disease is almost as great in the female as in the male. (The menstruating female, in fact is practically immune to clinical coronary heart disease). Various population groups have been compared and there appears to be some relation between the diet, fat metabolism, obesity and coronary disease. The "aged" heart without coronary

disease appears to function efficiently and is often "the last to go."

2. Hypertension and other vascular disorders—Vascular disorders are very common in the aged. We have learned how to separate lethal hypertension from the benign or hereditary type and to minimize the disastrous effects of hypertension which can result in brain, heart, and kidney damage. "Hardening of the arteries" or atherosclerosis is a frequent concomitant of aging and can result in serious consequences in the brain, heart, kidneys, extremities, etc.

B. Chronic pulmonary disease:

Emphysema and chronic bronchitis are among the major causes of disability and death in the aged. Cigarette smoking looms as a large causative factor. The result of these afflictions is inadequate oxygenation of the tissues resulting in poor overall function, shortness of breath and cough.

C. Chronic renal disease:

The kidneys are frequently involved in numerous illnesses. Repeated infections, nephritis, prostatic disease, kidney stones, hypertension and diabetes result in gradual destruction and finally in renal failure with uremia and death.

D. Malignant disease:

All forms of cancer appear to be more prevalent in the aged; the better control of infectious and congenital diseases results in more individuals living to the age when the malignant diseases occur. Exposure to potent chemicals in the atmosphere, in the food and water supply, cigarettes and exposure to radiation may also be important factors.

E. Metabolic disorders:

Diseases of metabolism such as diabetes, gout, cholesterol and fat abnormalities appear to be more prevalent with age and may cause accelerated aging and disease. Hereditary factors and obesity are prime causes. The diabetic, particularly, ages rapidly and manifests all of these changes.

F. Endocrine disorders:

Deficiency of thyroid, pituitary, adrenal, sex glands and pluriglandular disorders may be of importance. There may be combinations of sub-clinical deficiency with age that are not recognized or treated. Certainly hypothyroid individuals exhibit characteristics of accelerated aging. The menopause, both in the male and female, results in aging changes of skin and subcutaneous tissue and gradual involution of organ systems.

G. Disorder of musculoskeletal system:

The various arthritides, muscular diseases (rheumatism) and generalized bone disorders (osteoporosis) become important with age. Most of these fall into the non-specific categories, cause unknown. By themselves they do not result in shortening of the life span, however, they may result in serious complication such as broken bones, contractures, decrease in physical activity resulting in atrophy and considerable disability. Lack of activity in turn results in increased susceptibility to infection and loss of function of various vital organs. For example, immobility and contractures can result in decreased pulmonary ventilation, decreased cardiac output, osteoporosis and muscle wasting.

H. Gastrointestinal systems:

Dental and gastrointestinal disorders such as gallbladder, pancreas, liver and intestines, can result in poor digestion and malabsorption which will adversely affect nutrition; the latter may have considerable effect on aging due to poor replenishment of proteins and enzymes, etc.

I. Central and Peripheral Nervous Systems disorders:

Aging frequently results in a decrease in mental function and occasionally behavior disorders. The changes are usually attributed to cerebral vascular insufficiency, however, there may be many other factors such as disuse "phenomenon" various toxic and deficiency factors (vitamins and hormones, etc.) and of course psychological factors. It

has been demonstrated in animals that mental function can be kept relatively unimpaired by more activity and training. However, many older individuals feel that they are no longer needed or useful; this is frequently intensified by the system of mandatory retirement at a fairly early age and refusal of society to employ the elderly individual. The result is a tendency to withdraw from society.

J. Special Senses:

With age there is a gradual loss of vision due to cataracts and refractive error and also some loss of hearing. Many of these are on hereditary basis. The result may be a further withdrawal from society.

SUMMARY: Aging begins to appear at birth. Lesions can be demonstrated even in the infant that herald the onset of coronary disease. Therefore there is no one point in time where aging begins. Age 65 has been selected as a common indicator of aging, however, this is artificial and arbitrary. It has been well-demonstrated that certain changes occur in the individual as he ages, i. e., a decrease in efficiency, speed of performance, endurance, mental ability and special senses. This decline is a natural involution at the cellular level due to a decrease in efficiency of the enzyme systems and the related biochemical reactions plus superimposed "disuse" phenomenon. There is general agreement that disease has a profound effect on the aging process and may cause a gradual decline in function; on the other hand disease may be also the result of deficiencies brought on by the natural decline with age. This picture is strikingly presented by the animal made sick by radiation; this animal manifests premature aging.

In all probability, aging by itself does not cause death but only a decrease in overall function; death is caused by the superimposition of disease. The major killers appear to be cardiovascular, pulmonary, renal,

malignant and metabolic disorders. The outlook for the future is bright and would indicate several areas of approach:

1. Identification of the decline of function at the cellular level with development of methods of prevention.
2. The prevention or postponement of serious diseases, usually disease of degeneration such as cardiovascular, pulmonary, renal and metabolic.
3. The better management and treatment of crippling diseases such as arthritis, pulmonary and cardiovascular. Treatment should include active treatment, rehabilitation and sheltered workshop type of arrangements.
4. Replacement of badly worn out organs by artificial organs and by banked organs.
5. Development of better visual, hearing and orthopedic devices.
6. More active mental health and community programs designed for the aged individual.
7. Overall changes in society which would induce maximum utilization of the individual in spite of age thus eliminating the "disuse" phenomenon with its deteriorating physical and psychological factors.

The Roman, Cicero, wrote; "... old age must be resisted, and its deficiencies supplied by taking pains; we must fight it as we do disease. Care must be bestowed upon health; moderate exercise should be taken; food and drink should be sufficient to recruit, not overburden, our strength. And not the body alone, must be sustained, but the powers of the mind much more; unless you supply them, as oil to a lamp, they too grow dim with age."

I'd like to close with this inspiring poem by an anonymous author;

Nobody grows old by merely living a number of years; people grow old only by deserting their ideals. Years wrinkle the skin, but to give up enthusiasm wrinkles the soul. Worry, doubt, self-distrust, fear and despair—these are the long, long years that bow the head and turn the growing spirit back to the dust.

You are as young as your faith, as old as your doubt; as young as your self-confidence, as old as your fear, as young as your hope, as old as your despair.

Altitude Sickness

Women apparently suffer fewer symptoms of altitude sickness than men, according to a study of eight girls who spent 10 weeks at the summit of Pikes Peak, Colorado (altitude 14,110 feet).

Dr. Charles W. Harris and associates from Fitzsimons General Hospital, Denver, evaluated symptoms in University of Missouri coeds who had not previously been exposed to high altitudes.

Significant illness occurred during the first four days, the predominant complaints being headache, drowsiness, fatigue and insomnia. Menstrual changes consisted of decreased flow in five girls.

Gastrointestinal complaints and palpitations, shortness of breath and chest pains—fairly common in men—were rarely experienced by the girls. Weight loss, reflecting appetite, averaged less than 2 pounds for the girls during the first week, whereas eight men of similar age had an average loss of about 5 pounds.

Several medications for relief of symptoms of altitude sickness were evaluated. Methylenes blue and codeine were possibly of benefit. Aspirin was considered to be very beneficial for relief of headache and muscular complaints.—*Aerospace Med.*, November, pp. 1163-1167.

Tandearil® oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsey, New York

Geigy

Tandearil®
oxyphenbutazone

helps osteoarthritic
joints move again



3 out of 4 osteoarthritics com-
pletely or markedly improved

Please see ad-
joining page for
brief prescribing
summary

Sperling, I. L. 3 Years' Experience
with Oxyphenbutazone in the
Treatment of Rheumatic Disorders,
Applied Therapeutics 6:117, 1964.

76.9% of 407 patients

Watts, T. W., Jr. Treatment of Rheu-
matoid Disorders with Oxyphenbu-
tazone, Clin. Med. 73 65, 1966.

84.6% of 39 patients

TA-4919 PC

Why these 7 patients with **moderate to severe anxiety** may respond better to Mellaril

1. The agitated patient.

Anxiety—particularly that beyond the range of minor tranquilizers—frequently is expressed as gross motor restlessness, fidgetiness and purposeless movements, and may erupt into aggressive behavior. Mellaril is almost a specific for those patients whose anxiety follows such a pattern.





2. The psychosomatic patient.

The family physician is rarely given the diagnostic luxury of a classic, textbook "anxiety state." Most often he must probe for anxiety masked by a functional disorder—or which exacerbates a somatic problem. Double-blind evaluations have demonstrated that Mellaril can be a significant adjunct in the treatment of such patients.



3. The patient under situational stress.

Mellaril helps the patient deal with stresses of everyday life. Nonhabituating, it can be given for extended periods of time. It does not "separate" the patient from practical problems and pressures, does not induce euphoria or a fuzziness which can compromise the ability to cope with realities. Rather, it helps the patient move more competently in his daily world by eliminating useless tension, by allowing him to conserve emotional resources and energies, and to direct them against the problems really worth worrying about.



4. The menopausal patient.

The woman who sees change of life as the end of useful life requires support from both family and family physician. Whether the psychological impact of menopause is directly related to hormonal changes, or merely coincidental, is debatable, but estrogenic therapy is frequently inadequate. Mellaril is a useful aid for these patients and, alone, or in combination with reduced estrogen dosage, will help ease the menopausal misery.



5. The previously hospitalized psychiatric patient.

Such a patient may still require the type of medication he has been accustomed to, but because he is no longer in a controlled setting the acceptable level of adverse reactions must be lower. In such circumstances Mellaril is perhaps the drug of choice.



6. The agitated geriatric.

Tranquilizer therapy in the elderly patient always involves special (or at least accentuated) problems: the possibility of drug-induced ataxia, hypotension or depression, for example, assumes an additional significance. These reactions have rarely been observed in geriatric patients treated with Mellaril.



7. The constantly returning patient.

The anxiety patient who has not responded to a minor tranquilizer is not very likely to benefit from your minor tranquilizer of second choice. A major tranquilizer, such as Mellaril, may be indicated in such patients.

Contraindications: Severely depressed or comatose states from any cause, and in association with or following MAO inhibitors; severe hypertensive or hypotensive heart disease.

Precautions: Hypersensitivity reactions (e.g., leukopenia, agranulocytosis) and convulsive seizures are infrequent. Pigmentary retinopathy has been observed where doses in excess of those recommended were used for long periods of time. May potentiate central nervous system depressants, atropine, and phosphorus insecticides. Where complete mental alertness is required, administer the drug cautiously and increase dosage gradually. In addition, orthostatic hypotension (especially in female patients) has been observed. Epinephrine should be avoided in treatment of drug-induced hypotension.

Side Effects: Pseudoparkinsonism and other extrapyramidal disorders are infrequent; drowsiness, especially in high doses early in treatment, may occur; nocturnal confusion, dryness of the mouth, nasal stuffiness, headache, peripheral edema, lactation, galactorrhea, and inhibition of ejaculation are noted on occasion; photosensitivity and other allergic skin reactions may occur but are extremely rare.

Before prescribing, see package insert for full product information.

in moderate to severe anxiety, 25 mg. t.i.d.

Mellaril[®]

(thioridazine)





Periurethral glands



Bartholin's gland



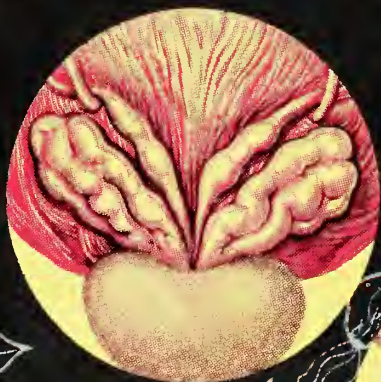
Cervical glands

Flagyl[®].....

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Seminal vesicles



Prostate gland



Bladder



Destroys Trichomonads Wherever They Are

Flagyl seeks out the sites where trichomonads hide. Only a systemic agent can. Flagyl does, selectively and effectively.

Flagyl destroys trichomonads in the inner crypts, glands and cavities of the genitourinary tract in both women and men. Consequently, Flagyl is capable not only of curing trichomoniasis in women but also of preventing reinfection.

Correctly used, with due attention to repeat courses of treatment for resistant, deep-seated invasion and to the presumption of reinfection from male consorts, Flagyl has repeatedly produced up to 100 per cent cure in large series of patients.

When the diagnosis of trichomoniasis is positive, Flagyl is positive.

Dosage and Administration—In women: one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

In men in whom trichomonads have been demonstrated: one 250-mg. oral tablet twice daily for ten days.

Contraindications—Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution—Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side Effects—Infrequent and minor side effects include nausea, metallic taste, furry tongue and headache. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness of an extremity, joint pains, confusion, irritability, weakness, flushing, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

Did Dorothy Larson show you her ankles in private? Now she shows them in public.

Your office examination would have confirmed that Mrs. Larson was up to her knees in edema. Her heart was beginning to fail. And her ankles had disappeared under an inch of salty water.

Along with digitalis, you might have prescribed Hygroton. To get rid of the edema. And to keep it from coming back. And you prescribe Hygroton the same way you usually prescribe digitalis: just once a day.

Tablet for tablet, Hygroton is just about the most effective diuretic going. And it costs a fraction of what Mrs. Larson would have to spend for equivalent therapy with short-acting diuretics.

In fact, Hygroton is an awfully nice way to treat the Mrs. Larsons in your practice. Just tell them you can get their ankles back at half price.

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihyper-

tensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease.





Hygroton[®]

chlorthalidone

3 in patients receiving corticosteroids, ACTH, or digi-
s. Salt restriction is not recommended.
e Effects: Dizziness, weakness, nausea, vomiting,
berglycemia, hyperuricemia, headache, muscle cramps,

postural hypotension, constipation, leukopenia, throm-
bocytopenia, agranulocytosis, impotence, dysuria, tran-
sient myopia, skin reactions, including urticaria and
purpura, epigastric pain, or G.I. symptoms after
prolonged administration.

Average Dosage: One tablet (100 mg) with breakfast
daily or every other day.
Availability: Tablets of 100 mg
For full details, see prescribing information.

6524-V(B)

...so you might say Hygroton is good public relations for Mrs. Larson

Because it gets her *out* in public in the first place. At 43, Mrs. Larson worries about appearances and swollen ankles don't help.

But Hygroton's cosmetic effect is only half the story. Hygroton and digitalis therapy helps her get back in the swing of things. Gives her a second wind. Gets rid of the extra pillow she needed for a good night's sleep. Now she even likes to take walks. Just for the fun of it!

When her troubles began, Mrs. Larson thought they were the signs of the change of life. It's a change all right, but one you can treat. And you can count on Hygroton to help keep her in public instead of in the hospital.

See preceding pages for brief summary of prescribing information.

Geigy



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
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Resist Bureaucratic Control—Governor Wallace Urges

It is a distinct privilege for me to be invited to the 106th Annual Session of the Medical Association of the State of Alabama, and I think it is most appropriate that I should speak at a luncheon sponsored by the "Politicians" of your profession—the members of the Alabama Medical Political Action Committee.

Being rather deeply involved in politics myself, I am pleased that members of your profession are displaying a growing interest in—and concern about—the political affairs of your State and Nation.

I do not feel I overstate the case when I say that never before in the history of this country has there been a greater need for an awakening of the people. There are those in high places in our federal government who, unintentionally or otherwise, would do great harm to the basic principles of democracy which we all cherish. On countless battlefields around the world Americans fought and died to preserve these freedoms, yet today we find those same freedoms in grave jeopardy from within. And the weapons being deployed against us today are not bullets, bayonets or bombs, but are

instead bureaucratic guidelines, illegal court decrees, and so-called federal funds.

I would cite as a classic example of this battle for freedom an instance which directly involved the medical profession of Alabama. I refer to the efforts of the United States Department of Health, Education and Welfare to withhold Medicare approval from Mobile Infirmary until members of that hospital's medical staff bowed down to a long list of illegal and arbitrary guidelines. As all of you know who are familiar with that situation, officials of HEW, displaying unbelievable impunity, sought to do great violence to what you consider and I consider to be the near-sacred relationship which should and must exist between the physician and his patient. Not only did HEW seek to seriously infringe upon the rights of the physician, but that agency went even beyond that and grossly abused the right of the patient by seeking to deny him a free choice of institution. I would be derelict if I did not now publicly commend the members of the Medical Society of Mobile County and the Medical Association of the State of Alabama for the determined stand they took in opposition to this blatant attempt by HEW to, in effect, seize control of the practice of medicine.

(Continued on Page 1490)

Text of address delivered by Governor Lurleen Wallace at Second Annual ALAPAC Luncheon, April 21, 1967.



Could it be
something
more than
growing
old that
“gets her
down”?

Mild mood depression, poor appetite, little interest in the present or future. Does this picture mean that she's giving in to functional fatigue?

When functional fatigue is part of her problem, Alertonic can help counteract accompanying apathy and inertia. It helps lift mood, stimulate appetite, and establish new interest in daily life.

Pleasant-tasting Alertonic combines pipradrol hydrochloride—a gentle cerebral stimulant—with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals ...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Available only on prescription
Alertonic®

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs* should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

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7-0370



(Continued from Page 1487)

I would like to think that the Mobile Infirmary case was an exception, and that there would be no similar attempts like that in the future. I would like to think that, and I am sure you would, too—but I fear this is not the case.

Because this is true, because the pressures we have felt are—I fear—only the beginning, it is all the more necessary that we stand united, resisting on every front, these concerted efforts which I insist will—if they are successful—deny us many of the freedoms which were intended for us by our founding fathers.

It is these trends in federal government which my husband has fought and will continue to fight. And if there is one among you in the medical profession who has grown weary of this talk of trends, let me make a suggestion to you. Take a minute, if you will, and read the medical legislation enacted by Congress in the past ten years. Read it and then ask yourself if this Nation has not in the past ten years moved further down the road toward socialized medicine than in all the previous years in American history. I would insist this is so, and I would insist that unless you as members of the medical profession, in concert with your colleagues of the other states, join hands in opposition to this trend, then the medical practice as you know it today is doomed.

Before leaving this subject, I would add this: Your support of ALAPAC suggests to me that you are politically awake, and that you are determined to resist with every resource at your command any efforts by bureaucratic social workers in Washington to tell you how to practice medicine. If this be the goal of ALAPAC, and I am advised that it is, then I wish you well. Perhaps I am an optimist, but I firmly believe that the highest authority in this land is not the Department of Health, Education and Welfare—it is not the Federal Courts—it is not the President of the United States. The highest authority is the Will of the People, and I refuse to accept the contention that the Will of the People is in favor of Socialized Medicine or Socialized Anything.

I will admit that it might now seem that the tide of battle is going against us, but the tide can be turned. For the sake of future generations, it must be turned.

For a moment might I discuss a common denominator which I, as Governor of Alabama, share with you, the members of the medical profession of this State.

First, I feel compelled to make one personal observation. With the possible exception of Governor William Wyatt Bibb and Governor Russell Cunningham—both of whom were practicing physicians—I would say that perhaps no other governor in the

(Continued on Page 1492)



Some People Think All Physicians
Make a Mint.

Juries, for instance.

They aren't supposed to know how well fixed you are if you're the defendant in a lawsuit. But there's something after your name that tips them off:

M.D.

And right or wrong, they tend to see dollar signs if an award goes against you.

It doesn't have to be a malpractice case, either. If a patient slips in your waiting room they'll still call you "Doctor" when the case comes to court.

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professional equipment. True to its name, it's not a complicated policy.

One Signature.



(Continued from Page 1490)

history of this State has felt a closer bond to the medical profession than I. Certainly I had always held members of your profession in high respect, as do all Alabamians, but not too many months ago my very life was placed in the hands of men of medicine. I say this not to be dramatic, but simply out of gratitude. . . . I perhaps would not be here today were it not for members of your profession. . . . I mentioned a moment ago a common denominator you of the medical profession share with me, the Governor of Alabama. That common denominator is a concern, a deep concern, for the health of the people of this State.

At the risk of provoking a debate from the men present, but perhaps getting nods of approval from the ladies in the audience, I would suggest that being a wife and mother, as well as Governor, causes me—and all women—to have stronger feelings about the health of my loved ones, my friends and of all people. I am not suggesting a lack of concern on the part of men, but only that women, by their very nature, feel stronger about such matters.

Whatever the reason, be it inborn or otherwise, let me say I am deeply concerned about the health of the people of Alabama. I will go further and say this—when historians of the future write of the Lurleen Wallace Administration, I personally can think of no tribute more pleasing to me than for them to say that my Administration was concerned about the health needs of the people.

I have said repeatedly in the past and I will say it again today. Programs and legislation designed to improve the health of our people will be given high priority in my Administration.

I feel that one of the immediate areas of need in the health field relates to mental health. Only a few weeks ago, accompanied by Dr. Robert Parker, I made a tour of the facilities in Tuscaloosa for the mentally ill.

I had been prepared for what I would see there, but even with this preparation, it was a shocking experience. As I walked through the wards of Bryce Hospital and Partlow School, I thought to myself how good it might be if all Alabamians could make the same tour. I think I know what their reaction would be. I am not ashamed to tell you what mine was. That night I got down on my knees and thanked the Lord that my four children were healthy, physically and mentally. I also made a vow that whatever I could do I would do to improve the lot of our mentally ill. Already, I am pleased to report, we have, through the cooperation of the Legislature, made a significant start in the mental health field. During the Special Session of the Legislature, a bill was passed which I signed into law appropriating \$450,000 which, when matched with other funds, will make possible the expenditure of approximately \$1,900,000 in the construction of two regional mental health clinics. Another bill also passed and signed into law appropriates an additional \$500,000 to the Mental Health Department for emergency needs at the State Hospitals. Both bills, and I think this is significant, passed the Legislature without a dissenting vote. While I can give no specifics at this time, I can assure you that additional legislation will be offered in the 1967 Regular Session designed to further improve our care for the mentally ill.

Let me tell you also that what is done in the area of mental health will not come at the expense of other areas of health services. There are some who would separate mental health from health. I do not subscribe to that philosophy. To me, anything we do to treat the sick of Alabama—be they physically sick or mentally sick—is done in the name of health.

I am aware that there are needs existing in the area of tuberculosis control and treatment, that there has been an upsurge of venereal disease in Alabama which warrants our concern and attention, and that there is great interest among the members of the medical profession concerning the pollution

of our streams, rivers and lakes as well as the pollution of the air of our municipalities. I would add that I look upon pollution—be it water or air—as chiefly a problem of health and I will encourage the Legislature to so view it in that light.

In closing may I restate my genuine concern for what is your genuine concern—the health of the people. In matters of health I will of necessity have to turn to your profession for guidance and counsel. By working together I would hope that it can be said of you and me . . . that we diligently sought to improve the health of the people.

My sentiments are perhaps best expressed by an old proverb which I will share with you: "He who has health, has Hope; and he who has Hope has Everything."

Thank you.

Scabies Transmitted By Pets

Scabies, a contagious skin disease of domestic and wild animals caused by infestation with mange mites, has a high rate of transmission to persons in close contact with their infested pets. There seems to be a very definite correlation between the extent, severity and duration of the eruption and the frequency and intimacy of exposure. Major Edgar B. Smith, MC, USA, and Capt. Terrence F. Claypoole, VC, USAR, reported 22 cases, mostly in children, contracted from pet dogs in a one-year period at Fort Benning, Ga. Excellent results were obtained with treatment with a single 24-hour application of gamma benzene hexachloride cream applied over the whole body. Steroids were valuable in patients with severe inflammatory reactions, and antibiotics were used in cases of secondary bacterial infection. Treatment of the pet, they said, is more difficult and often more prolonged.—*J. A. M. A.*, Jan. 9, pp. 59-64.

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PHENOBARBITAL 16 mg.

(Warning: may be habit forming)

BENSULFOID® (See P D R) 65 mg.

Precaution: same as 16 mg. of phenobarbital



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A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.

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Alabama Department of Public Health



Field Testing Program For Carbon Monoxide

John D. Rayfield, M. D.

Sylacauga, Alabama

Since, as far as I know, this program has no precedent, I think it might be of interest to explain its origin. From past experiences with carbon monoxide in the home environment and from talking with local physicians experienced with the problem, it was decided to petition the Sylacauga City Council to support a home-testing program. The Council responded and purchased a M. S. A. Carbon Monoxide Tester No. 47133 made by Mine Safety Appliance Co. as testing equipment. They further agreed to allow the City Housing Inspector, employed by the City but assigned to and under the direction of the Health Department, to perform the testing.

Following approval by the County Board of Health, the program was introduced to the County Medical Society. They agreed that any physician who saw a patient suffering from apparent carbon monoxide exposure symptoms would contact the Health Department giving the patient's name and address. The physician would explain the home testing program to the patient.

The testing program officially began February 2, 1965. When notified by the physician the inspector visited the home. After testing the gas appliances, the family was told whether or not they were emitting carbon monoxide and whether they should have the appliance removed or adjusted. If car-

bon monoxide was present, a prepared form stating the amount was completed and sent to the referring physician. The person or persons affected were advised to see their physician for a detailed report and explanation. If carbon monoxide was not present, the physician was so informed. The inspector made a follow-up call on all positive appliances.

Carbon monoxide is a colorless, tasteless, and odorless gas which is not poisonous in the true sense of the word as compared to arsenic, some insecticides, and similar compounds. Damage results when it unites with the hemoglobin, forming carboxyhemoglobin in the place of oxyhemoglobin. Blood hemoglobin has a greater elective affinity for carbon monoxide than for oxygen. Some authorities place this affinity as low as 20, while others place it as high as 300. Niclous of the University of Paris gave the best answer about this affinity when he showed that animals when placed in the environment took in equal amounts of one part carbon monoxide to 220 parts oxygen.

Because of this elective affinity, very small amounts of carbon monoxide in the air breathed can do much harm if exposure is prolonged. There are two factors to be considered: the concentration of carbon

(Continued on Page 1496)



*"When I couldn't even smell corned beef and cabbage,
I decided it was time for you, Doc."*

Maybe he doesn't know when he's well off. But you might want to prescribe long-acting Novahistine LP anyway.

Two tablets in the morning and two in the evening will usually provide day and night relief by helping to clear congested air passages for normal, free breathing. Novahistine LP is formulated to provide continuous therapeutic effect for 8 to 12 hours. The decongestant ingredients help restore normal mucus secretion and ciliary activity—physiologic defenses against infection of the respiratory tract.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis

(Continued from Page 1494)

monoxide present in the air, and the length of time one is exposed. Regardless of how small the air concentration, the amount of carboxyhemoglobin increases with the length of exposure. Industry standards set 100 parts per million or .01 per cent as the tolerance level for carbon monoxide. We have definitely proved that this level cannot be tolerated in the average home: an unadjusted gas heater in a home of poor construction and repair, where there are cracks and holes for fresh air to enter, is not as dangerous as a modern well constructed home. Smaller rooms add to the hazard.

The usual symptoms of carbon monoxide exposure are dizziness, headache, loss of acuteness of mind, nausea, vomiting. Sufficient exposure can cause coma and death. These symptoms can be indicative of many conditions, but any of them should be sufficient to warrant investigation of the gas heating system, whether it be natural or liquid petroleum gas.

It has been shown by Shulte that symptoms referable to the brain may be detected in blood concentration of five to 20 per cent carboxyhemoglobin, with symptoms increasing as concentration increases. Steadiness and muscle persistence were not measurably altered by blood concentrations or carboxyhemoglobin up to 20 per cent. Unconsciousness may come with 50 per cent concentrations; Death may occur with 70 per cent or above. These figures vary with exercise and rapidity of breathing. According to McBay, one per cent (1000 ppm.) of carbon monoxide, a lethal concentration in the air, may be produced in the blood in less than ten minutes. Carbon monoxide is eliminated more slowly from the body than it is taken in. By breathing air, half the blood carbon monoxide is eliminated in two to four hours; but by breathing oxygen, this elimination time is cut from 15 to 30 minutes.

METHOD OF INSPECTION. The inspector tested all appliances in the home that

could be a source of carbon monoxide. Any appliance testing positive to a degree that could be a hazard to health was removed immediately. (Note: Tolerance levels of carbon monoxide will be discussed later in this report). In homes where appliances tested positive, 96 per cent were either removed or repaired by the occupants. Compliance was on a volunteer basis as the city-owned gas company has no legal control except in the event of fire hazard. The health department has no jurisdiction unless an appliance is a potential menace to public health and safety.

Tests were made in the heat stream approximately 2 feet above the appliance. Hot water heaters were tested near the burner door and at the vent connection. Gas ovens were tested near and above the flue outlet.

A follow-up inspection was conducted when occupants had been subjected to CO exposure, and the defective appliance had been repaired or removed. Ninety-three per cent of the occupants claimed either complete recovery or marked improvement.

To date, 223 appliances have been tested; 101 were positive for carbon monoxide.

The unvented space heater was the primary source of carbon monoxide poisoning in the home environment. Many of these heaters were designed to operate on Butane and Propane gas, but were found to be connected to natural gas. Because orifices in these heaters were incorrect in diameter for natural gas, incomplete combustion and carbon monoxide emission resulted. Any type of unvented space heater will produce carbon monoxide to some degree. When the air-gas ratio is out of adjustment, however, the output is greatly increased. Space heaters were found with dirt and lint filling the air mixing chamber. Some were old and of poor design with no air mixing chamber.

No carbon monoxide exposure was traced to kitchen ranges; however, a majority of ovens showed a trace of CO being emitted.

(Continued on Page 1498)

There are 35,700* undetected diabetics in Alabama

Most of these are probably among patients over 40; the overweight; relatives of diabetics, and mothers of large babies. By the time polyphagia, polyuria, polydipsia, pruritus or other overt symptoms of diabetes appear, damage may have been done that could have been minimized.

DEXTROSTIX® gives you a reliable blood-glucose estimate in 60 seconds.

Why Wait?



*Based on Statistical Report, U.S. Dept. Commerce, ed. 86, and Fisher, G. F., and Vavra, H. M.: Pub. Health Rep. 80:961 (Nov.) 1965.

Note: DEXTROSTIX is not meant to replace the more precise analytical laboratory procedures such as needed in glucose tolerance testing.

AMES COMPANY, Division Miles Laboratories, Inc., Elkhart, Indiana 46514 428R67



Ames

(Continued from Page 1496)

The rate was much higher after the oven was first lighted.

Only one hot water heater tested positive. The vent pipe was found to be completely obstructed by a piece of asbestos shingle.

Eight floor furnaces were tested with two testing positive. In both cases, a hole had burned through the baffle, allowing gases to enter the heat stream.

CASE HISTORIES. Case No. 10—Physician Referral.

A mother and child slept in a room 10 ft. x 12 ft., which was heated by an unvented space heater. The heater was old and completely out of adjustment. A test of the appliance showed a carbon monoxide output of 100 ppn. The child's crib was approximately four feet from the heater. The child had been discharged recently from the hospital, and upon returning home had become ill again. The mother also complained of obvious symptoms of carbon monoxide exposure.

Two weeks after removal of the defective heater, the home was rechecked by the inspector; the mother reported that she and the child were in good health.

Case No. 15—Physician Referral.

This family consisted of the father, mother, and one male child. The child had been sick all winter, and both parents complained of CO exposure symptoms. An unvented space heater with orifices designed for liquified petroleum gas was the only source of heat. It was emitting 300 ppn. of carbon monoxide.

The heater was removed and electric heat installed. A recheck 15 days later revealed the child apparently recovered, and the parents no longer experiencing headaches or nausea.

Case No. 44—Physician Referral

This case involved a family of 13 people living in three rooms with no interior doors.

There were two female adults and 11 children ranging from three months to 12 years of age. An unvented space heater with no burner inserts or air mixing chamber was the only source of heat. A test showed 800 ppn. carbon monoxide output. It was apparent that the entire family had symptoms of CO exposure. Two of the children were confined to bed.

This family was in a very low income bracket; the dwelling was dilapidated and unsanitary. After inspection by the Housing Code inspector, the house was condemned and the family relocated.

Six weeks later, the occupants appeared to be in good health with the exception of the infant who the mother reported was suffering from some type of respiratory condition.

Case No. 32—Physician Referral

This case was a referral to a home occupied by the father, mother, and a 16-year old girl. The girl reported that she had been suffering from nausea and dizzy spells. A test of the two unvented space heaters revealed only a trace of carbon monoxide. The parents then disclosed the fact that the girl had just returned from an extended visit with her grandparents.

At the home of the grandparents, an unvented space heater was emitting carbon monoxide at 200 ppn. This heater was located in the family living room, which was also used as a sleeping room.

The grandmother had been experiencing severe headaches. Her husband had been admitted to the Veterans' Hospital the week prior with what she described as a "mental block."

The defective heater was removed, and a vented type installed. A later check found the girl in apparent good health, and the grandfather home from the hospital. It is not known if his illness was attributed to carbon monoxide exposure or to his present state of health.

Case No. 26—Physician Referral.

All four occupants of this home reported a combination of symptoms of CO exposure. The source of heat was a 35000 BTU vented gas heater. Inspection found the vent pipe to be completely disconnected from the heater with the combustion gas being discharged into the room. A test showed a carbon monoxide output of 1000 ppm.

The vent pipe was connected, and a check three weeks later found all of the occupants apparently recovered.

Case No. 60—Physician Referral

In this case seven people occupied a house, with three of them remaining there at all times. These three were sick. They complained of dizziness, weakness, nausea, and drowsiness. The two heaters in the house were in a state of disrepair and burned liquid petroleum gas. One heater emitted .1 per cent (1000 ppm.) carbon monoxide; the other heater emitted .02 per cent (200 ppm). The heaters were removed, and a return call five days later showed that the three people were doing fine.

SUMMARY AND CONCLUSION

In summary of the experiences we have had we have come to the following conclusions.

1. CO home poisoning is a problem.
2. Further work in this field is necessary.
3. The public, appliance dealers and service personnel should be made aware of this hazard.
4. Continuous exposure to very low concentration of CO as we found in homes is a very definite health hazard and a public health problem.
5. Some gas associations have expressed their desire to co-operate with us in this program and have invited us to sit in on their safety council meetings and work with them on a solution to the problem.

SCHOOL BUS TESTING

On the morning of October 3, 1966, a school bus arrived at one of the schools in _____ County with two children unconscious. They had been sitting at the rear of the bus. The first to be loaded on the bus, this brother and sister had been riding about 45 minutes. It was determined that these children were victims of carbon monoxide exposure. Mechanical examination of the bus established that the end of the exhaust pipe had been partially crushed.

Stimulated by this incidence and by the fact that we were already in the home-testing program in the Sylacauga area, we immediately turned our attention to school buses. With full and complete co-operation of the county superintendent of education, we began testing school buses for carbon monoxide and looking for mechanical defects of the exhaust system of all school buses in Talladega and Shelby counties.

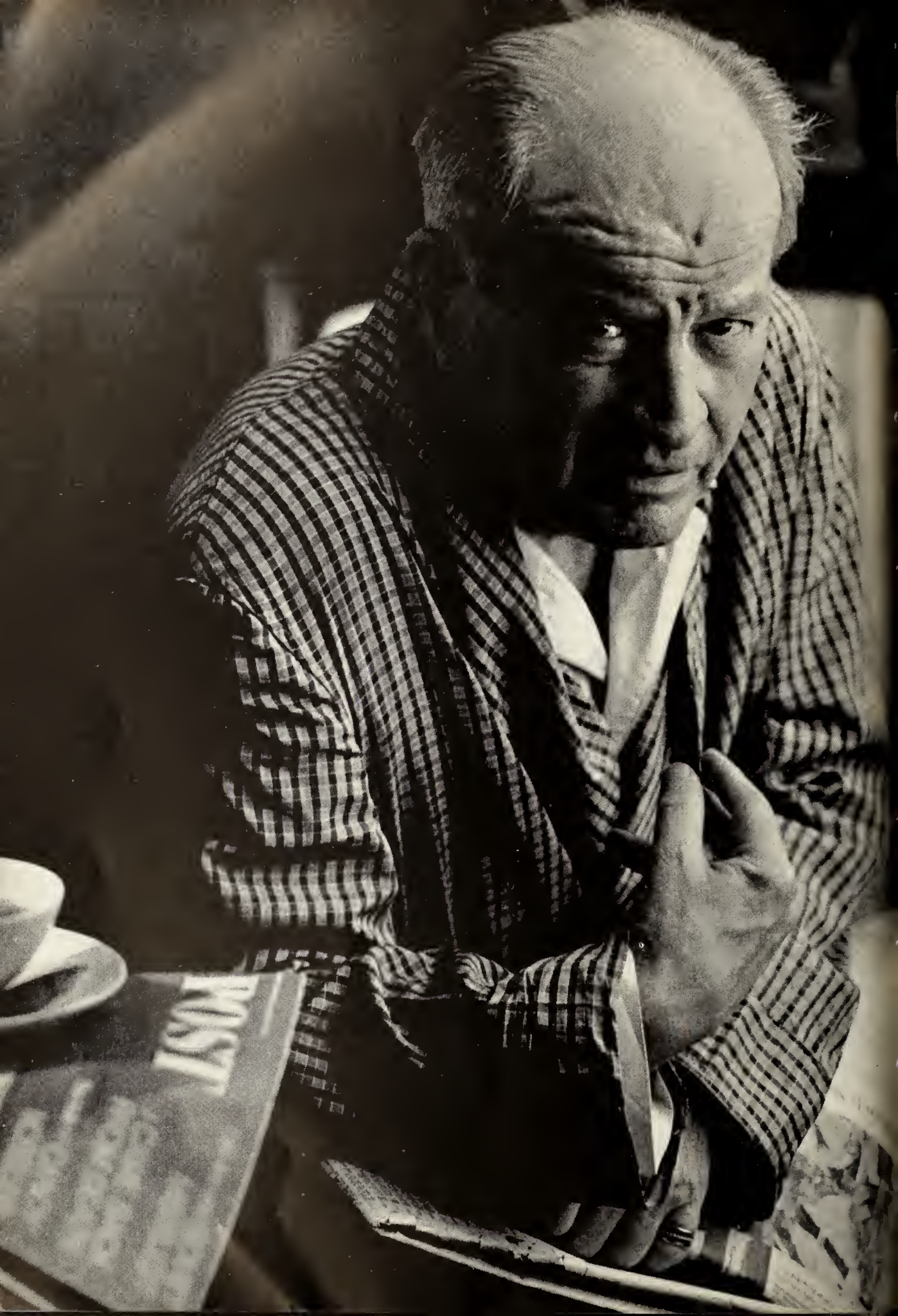
METHOD OF TESTING SCHOOL BUSES

The same testing appliance was used to test school buses as was used in the home-testing program. When the buses arrived at the schools, the children unloaded, the windows were closed, and the engine was allowed to idle for approximately five minutes. On entering the bus, the inspector would depress the tester bulb and proceed from the front of the bus to the back and return to the front, slowly pulling air through the indicator tube. Carbon monoxide was entering the buses from an opening in the floor board or fire wall and in the rear of the bus through loose fitting emergency doors. Front openings were discovered around the accelerator, brake and clutch pedals, and rubber boots around the gear shift levers and emergency hand brake.

RESULTS OF TESTS

One hundred and ninety-one (191) buses were tested with carbon monoxide being

(Continued on Page 1502)



I'm supposed to get up and do things?

With my heart?

It's entirely natural—and may even be desirable—for the cardiovascular patient to be somewhat anxious about himself.

But when anxiety leads to unreasonable self-imposed limitations and restrictions . . . when it aggravates cardiovascular symptoms . . . when it interferes with restful sleep, measures to help alleviate the anxiety are probably in order.

One measure, of course, is reassurance. Another, adjunctive measure, is EQUANIL (meprobamate).

Over a decade of experience has shown that EQUANIL (meprobamate) is generally well tolerated as well as effective. Side effects are usually limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose

should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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A quality controlled product of
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to help relieve anxiety and tension occurring
alone or secondary to organic disease

Equanil[®]
(meprobamate)



(Continued from Page 1499)

found in concentrations ranging from a trace to .08 per cent (800 ppm). Exposure time varied from 20 minutes to 120 minutes, with the average being 56 minutes. At this point I would like to propose a question. How long would it take a child to return to his full mental capability if exposed to 800 ppm carbon monoxide for 120 minutes or even 56 minutes?

Of the total buses tested, ninety-nine (99) tested positive for carbon monoxide. Ninety-eight (98) buses had visibly defective exhaust systems beyond the engine manifold area, and 79 buses had faults in the engine manifold area or visible openings in the cab fire-walls or floor board, in the vicinity of the driver. The drivers were not questioned at any time about their feelings, but several volunteered statements that they had headaches or dizziness when they drove their buses.

A recapitulation of the buses tested shows:

Total number buses tested, 191.

Number positive, 99

Per cent positive, 51.8 per cent

Number with defective exhausts and/or defective manifolds

Number with defects, 128

Number positive CO, 99

Per cent, 69.5 per cent

Number with no visible defects, 63.

Number positive CO, 11

Per cent, 16.0 per cent

CONCLUSIONS

May I say at this time, that in my opinion, the buses tested in the two counties are in as good if not better mechanical condition as the average school bus operating over the state. Therefore, this is not a local problem, but a state-wide one.

Information from this investigation establishes absolute correlation between a defective exhaust system and the presence of carbon monoxide in buses tested. Openings

around the emergency door and in the floor board make it possible for carbon monoxide to enter the bus. This is significant as the average automobile exhaust contains from .5 per cent (5000 ppm) to 15 per cent (150,000 ppm) carbon monoxide, depending upon the engine efficiency. Because the exhaust pipe is located near the rear of the bus, when the bus is in motion a partial vacuum pulls exhaust fumes into the bus through unsealed emergency doors.

CONCLUSION:

1. More work in the field should be done.
2. As a result of this study, we feel that the exhaust system of school buses should be redesigned.
3. School buses should have frequent mechanical examinations with carbon monoxide exposure in mind.

BUREAU OF PREVENTABLE DISEASES

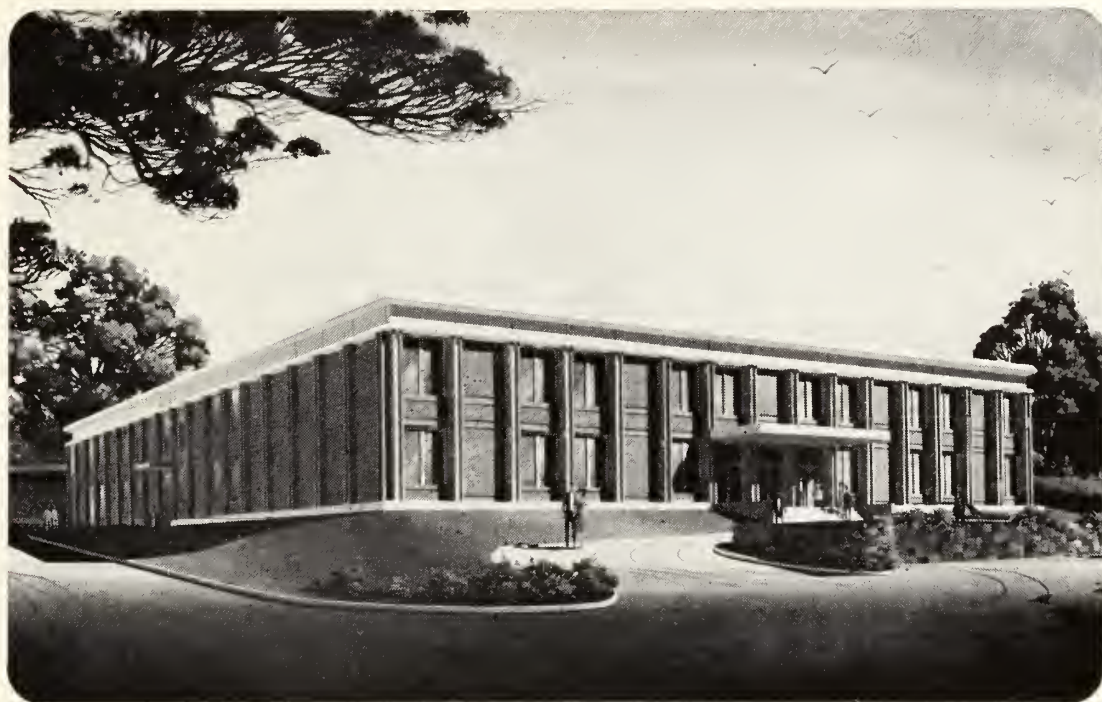
W. H. Y. Smith, M. D., Director

Current Morbidity Statistics 1967

	March	April	*E. E. April
Tuberculosis	140	144	119
Syphilis	125	98	142
Gonorrhea	467	273	294
Chancroid	1	1	2
Typhoid fever	0	1	1
Undulant fever	0	0	0
Amebic dysentery	0	1	5
Scarlet fever & strep. throat	445	580	151
Diphtheria	0	0	0
Whooping cough	2	3	9
Meningitis	10	9	7
Tularemia	0	0	0
Tetanus	0	2	1
Poliomyelitis	0	0	0
Encephalitis	0	0	1
Smallpox	0	0	0
Measles	314	292	502
Chickenpox	49	163	177
Mumps	97	153	91
Infectious hepatitis	23	43	41
Typhus fever	0	0	0
Malaria	2	0	0
Cancer	669	1,000	662
Pellagra	0	1	0
Rheumatic fever	10	19	18
Rheumatic heart	13	24	29
Influenza	1,638	376	674
Pneumonia	340	491	289
Rabies—Human cases	0	0	0
Pos. animal heads	14	12	0

As reported by physicians and including deaths not reported as cases.

*E. E.—The estimated expectancy represents the median incidence of the past nine years.



New, Long-term Psychiatric Facility

The new forty bed Parkwood Hospital specializes in long-term treatment of the mentally ill. Under the direction of a Medical Director, the hospital facilities are available to over thirty psychiatrists who are on its staff. Parkwood provides a full complement of exceptional facilities including X-ray, laboratory, pharmacy, occupational and music therapy, patient beauty parlor and an outdoor recreational area. □ Special efforts were made to combine maximum patient comfort with a warm, secure, residential atmosphere readily conducive to psychotherapy. □ We will be pleased to provide further information upon request.

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Social Insurance in Britain and Sweden

by Andre Maisonnier

ANDRE MAISONPIERRE, manager of the Casualty Department of the American Mutual Insurance Alliance, recently visited England and Sweden to observe social insurance programs and practices as a member of a study group organized by the Commerce and Industry Association of New York. This article summarizes some of his major impressions and conclusions about social insurance in the two countries.

Following World War II, Great Britain enacted sweeping social insurance legislation in an effort to coordinate the existing mixture of state insurance, private coverages and welfare programs. The objective was to provide the entire British population with health, disability, unemployment and retirement benefits financed by compulsory contributions from employers, employees and general tax revenues.

In the process, the government pre-empted many coverages formerly purchased by individuals from private carriers or provided by employers under employee-benefit plans. The Ministry of Social Security took over the entire workmen's compensation system, and employers lost all control over the administration and costs of this program. Control over employee medical benefits likewise was taken out of the private sector and placed in the hands of the Ministry of Health. Responsibility for occupational safety was vested in a third agency, the Ministry of Labor.

The result is that British employers and employees alike now pay a heavy price for compulsory government programs which may or may not fit their needs. They have no control over the cost of these programs, since they are taxed the same amount whether or not they succeed in reducing accidents and illnesses. Moreover, employers were made subject to double liability for

industrial injuries, since employees now can collect workmen's compensation benefits and then sue their employers under employers' liability.

Employees pay a heavy price in other ways as well. Industrial accident rates in Britain are about three times as high as in the United States, in spite of the British government's heavy involvement in establishing and enforcing safety codes for workplaces. Government officials admit privately that they have gone about as far as they can go in improving occupational safety by legislation and enforcement procedures. They now admit that the employer must be motivated to make safety a prime management objective if Britain's poor record is to be substantially improved.

The irony is that Britain could hardly have devised a system less likely to motivate employers to reduce accidents or to discourage their employees from overutilizing the various government benefit programs. All of the financial incentives built into privately-financed benefit programs were stripped away when employers were told that their performance would not affect the social insurance taxes imposed on them. Moreover, by placing the administration of disability benefits, medical benefits and occupational safety under separate government agencies, the British Parliament made it impossible for the government itself to make coordinated use of the tools and disciplines available to it.

The British experience has several impli-

Reprinted from the JOURNAL of American Insurance-American Mutual Insurance Alliance.

cations for the future of workmen's compensation and employee health programs in the United States. Here are some salient conclusions drawn from observation of the British social insurance system:

1. The private system of workmen's compensation failed in Britain, and was absorbed by the government, because it was not meeting the legitimate needs of injured workmen. Too many groups of employees were not required to be covered. Wage replacement benefits were grossly inadequate. Medical expenses were not covered at all, so that employers had no control over the medical management of injuries and had little opportunity or incentive to encourage rehabilitation. Administration of the workmen's compensation system was complicated by the fact that injured employees could elect to accept scheduled benefits or sue at common law (but not both, as is now the case). There is considerable evidence that employers and insurance carriers made a practice of encouraging lump-sum settlements under employers' liability instead of offering workmen's compensation benefits in order to escape administration scrutiny.

To the extent that coverage gaps, limitations on medical benefits and inadequate benefit levels exist in the U. S. system of workmen's compensation, our system is vulnerable to attack by those who would replace it with government-operated programs.

2. Control over the medical management of occupational injuries must remain an integral part of the workmen's compensation system. Medical benefits, wage replacement benefits, job placement programs and other parts of the system are not separate entities, but tools to be used in a coordinated way to reduce disability, prevent dependency and encourage the injured employee's return to work whenever possible.

3. The most effective way to promote efficiency in a social insurance system, and to control the overall costs of the system, is to provide within the system itself a financial incentive to reduce losses. It has often

been argued that a centralized government agency can collect and distribute money with less overhead cost than employers and private insurance companies. But the British experience indicates that the so called "savings" are more than offset by higher losses.

4. Human losses resulting from accidents and industrial illnesses likewise are more likely to be reduced under a system which gives employers a financial yardstick for measuring their progress or lack of progress. Financial incentives produce results which cannot be obtained by legislation and enforcement procedures alone.

SWEDEN'S COORDINATED PROGRAM

The major thrust of Sweden's 1954 workmen's compensation act is to provide income benefits to the injured worker unable to work as a result of an industrial injury. The act is compulsory and covers all employees. It is, in theory, financed solely by employers, but this is not so in practice. Benefits cover medical care, dental care, hospital care, travel compensation, medicine and artificial limbs, as well as temporary total disabilities and permanent disabilities, and payments to widows. The coverage is available either through the competitive state fund—the National Insurance Office—or one of the mutual insurance companies formed for this purpose by employers, generally through trade associations. If an employer has no insurance he is automatically considered insured in the National Insurance Office.

A very basic concept included in the 1954 legislation is the coordination between the workmen's compensation system and the general health and accident insurance programs. Individuals who are insured under both systems will, if they sustain an industrial injury, seek recovery from the workmen's compensation system only after 90 days—a so-called coordination period—has elapsed. If the injury involves the right to a permanent disability pension, however, the coordination period ends no later than the date when the right to the pension begins. During the coordination period, workmen's

compensation benefits are paid by Public Sickness Funds in accordance with the provisions of the Insurance Act for Sickness.

An act, passed by Parliament in 1967, and scheduled to become effective January 1, 1968, will, for all practical purposes, completely integrate workmen's compensation with the sickness benefit program. The co-ordination period will be abolished and benefits will be paid during the period of temporary disability as well as permanent disability by the insurance fund. All nine private mutual insurance companies covering 50 per cent of Swedish employees and the state fund will go out of existence.

The future of these private companies is clouded. Because they are authorized to underwrite only workmen's compensation insurance, they must go out of business. An attempt is being made to secure the approval of policy-holders to merge the surplus of these companies for the purpose of creating a national industrial safety council. There is particular concern among some Swedish employers that whatever organized safety activities exist will falter after January 1, 1968. It is generally recognized that the mutual companies have been in the forefront of providing safety services and even though the services provided are recognized to be far less than those provided by companies in the United States, they do fulfill a basic need.

As in Britain, workmen's compensation never achieved the major role within the Swedish industrial process which it has in the United States. The development of associated social insurance programs, much more costly than workmen's compensation, has overshadowed the compensation system.

The major thrust of the compensation system has been the payment of benefits. Although rehabilitation is coming into its own in Sweden, it has never been closely associated with workmen's compensation. Many employers have set up special rehabilitation programs aimed at both the physical and the vocational recovery. However, rehabilitation has been associated with the conser-

vation of manpower, one of Sweden's scarcest items.

The National Insurance Act, enacted in 1962, brought together what were considered the most important branches of Swedish social insurance—health and maternity insurance, basic and supplementary pensions. Payments for these benefits were made by public sickness funds. Each county has one such fund. Every town represented on a county council has such a public insurance benefit society. These funds are not governmental agencies in the true sense of the word. They constitute a special type of independent judicative body with rights to collect dues, and possess a certain similarity to municipal organizations. These funds come under the supervision of the National Insurance Office which also approves the size of the contributions (premiums) to the funds.

Benefits are payable by the funds to all wage earners as well as to a nonworking woman who either is married or is supporting children.

OBITUARY

Dr. Irvin Milton Wise

Dr. Irvin M. Wise, 67 year old Mobile Pathologist died April 25, 1967. He was a graduate of the Medical School of the University of Indiana and specialized in Pathology. He was a member of the Medical Society of Mobile County, The Medical Association of the State of Alabama, American Medical Association, American College of Physicians, College of American Pathologists and American Society of Clinical Pathologists.

Dr. Wise served as pathologist on the Mobile Infirmary Staff since 1930. Prior to this he developed one of the first departments of X-ray at the Mobile City Hospital and later became director of the Hospital's Clinical Laboratory.

He was a veteran of World War II. Interment was in a National Cemetery.

Abortion: The Doctor's Dilemma

"The doctors and mothers of this country are hooked on the horns of a fantastic medicolegal dilemma."

So does Dr. Cecil B. Jacobson, George Washington University Hospital, Washington, D. C., summarize therapeutic abortion.

The horns are clearly visible.

- "The decision (to perform therapeutic abortion) is a medical one . . ." states the *St. Louis County (Mo.) Medical Society Bulletin*.

- "The problem is basically a social one," asserts the World Health Organization's *World Medical Journal*.

- Both factors are involved, argues the British counterpart of the American Psychiatric Association.

Medicine Vs. the Law

"American medicine is . . . confronted with a situation whereby many of its conscientious practitioners are daily acting contrary to existing laws," notes the *Journal of the American Medical Association* (Jan. 16, 1967).

The majority of state laws allow abortion only to save or preserve the life of the mother. With modern prenatal, obstetric, and postpartum care, said *JAMA*, "it is an unusual pregnancy which cannot safely be carried to term."

Despite this fact, *JAMA* continues, "each year in the United States approximately 10,000 pregnancies are terminated by licensed physicians in approved hospitals with the knowledge and concurrence of consulting colleagues."

Survey Results

A nationwide survey of practicing physicians by *Modern Medicine* revealed, on the basis of 40,089 returns, that 86.9% are in favor of liberalizing the laws on therapeutic abortion.

At the top of the list were psychiatrists, of whom 94.6% expressed their desire for more liberal laws. Obstetricians and gynecologists were least in favor of liberalization. Even so, 83.7% voted for a more liberal approach.

Specific conditions and the percent of physicians who thought these indications should be legal included:

- Substantial risk of maternal death 76.5%
- Pregnancy after rape or incest 75.1%
- Direct, positive evidence of fetal abnormality 71.7%
- Substantial risk to maternal physical health 69.7%
- Possibility of fetal abnormality (rubella exposure, Rh incompatibility, inheritable disorders) 62.7%
- Substantial risk to maternal mental health 60.6%
- Substantial risk of maternal suicide 58.6%
- Substantial risk to maternal emotional health 44.5%
- Illegitimacy 29.1%
- Socioeconomic reasons 26.6%
- At the request of the pregnant woman, for any reason 14.3%

Of those favoring more liberal laws, 962 said none of the above should be legal indications. These physicians apparently feel there should be no law at all on the subject.

On the other hand, 2,605 of the physicians who do not want more liberal laws also said none of the listed indications should be legal. These doctors evidently believe all abortions should be illegal.

As expected, the religion of the physician apparently influenced his reply. Slightly less than half—49.1%—of the doctors who identified themselves as Roman Catholics

were in favor of more liberal laws. In contrast, 93.3% of those who indicated they were of another or of no denomination approved more liberal laws.

The sentiment for more liberal abortion laws is, however, not without its limits. The *Modern Medicine* survey clearly indicates that only a small percentage of those questioned would allow an abortion "on request." Rather, the more liberal indications generally favored are those contained in the model law proposed several years ago by the American Law Institute. They include the mother's physical and mental health, risk of grave fetal abnormality, rape, and incest.

Legal Immunity

There apparently has never been a case reported of a conviction of a physician for abortion in a licensed hospital. Only in Pennsylvania has one been brought to trial for performing a therapeutic abortion, and he was found not guilty.

For the first time, however, the physician's informal immunity to the law in some circumstances is being questioned. Nine reputable and respected San Francisco physicians currently face charges of unprofessional conduct for having performed therapeutic abortions on women exposed to rubella.

California has been in the midst of strong efforts to have the state's law on abortion liberalized. The charges against the San Francisco doctors could have set the stage for a court case with national implications.

On the other hand, if the law is changed before final action is taken by the Board of Medical Examiners, the board might be in a position to drop the charges.

Change Comes Hard

Moves to liberalize long-standing abortion laws have been started in nearly half the states. Some have been killed by lawmakers;

others face stiff opposition. As of March 16, according to Associated Press, liberalization measures have been defeated or tabled in Nebraska, Arizona, New York, New Mexico, North Dakota, Connecticut, and Georgia. Bills to change the laws or appoint groups to study possible revisions were pending on that date in Hawaii, Illinois, Oklahoma, Pennsylvania, Rhode Island, Maryland, Nevada, Oregon, Texas, Minnesota, and Maine, as well as California.

Since that date, the New Jersey legislature rejected a proposed study of the state's abortion law, and a bill passed the legislature in Indiana but was vetoed by that state's governor.

In Colorado, a liberal abortion bill was approved by the legislature on April 8 and was awaiting final action by the governor. The bill would allow abortion, upon unanimous agreement of a three-member board of physicians, for: risk of maternal death or serious, permanent impairment of physical or mental health; likelihood of grave and permanent fetal abnormality; and rape or incest if the gestation period is under sixteen weeks or the mother under 16 years of age.

As the various states ponder the problem, the arguments continue within the medical profession.

The Royal Medico-Psychological Association of England firmly believes that "... in addition to traditionally accepted medical and psychiatric criteria (for therapeutic abortion), all social circumstances should be taken into account."

Social considerations aside, precisely what are the medical and psychiatric indications for therapeutic abortion? And just how "traditionally accepted" are they?

Dr. David G. Decker of the Mayo Clinic and Foundation, Rochester, Minn., reviewed in the January 1967 issue of *Minnesota Medicine* the indications for therapeutic abortion at the Mayo Clinic in the past decade.

(Continued on Page 1510)

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I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

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(Continued from Page 1508)

The list, Dr. Decker said, indicated that "there are few, if any, absolute medical indications for therapeutic abortion in the present state of medicine. Almost all of the indications are relative."

A substantial body of statistics supports this contention and indicates that therapeutic abortion is increasingly performed for psychiatric reasons.

Dr. E. W. Anderson, emeritus professor of psychiatry at the University of Manchester, England, maintains: "There has always been a sharp cleavage of opinion about psychiatric indications for termination of pregnancy, and there is still much uncertainty about these indications."

In an issue of the *World Medical Journal* devoted to the subject of abortion, Dr. Anderson says:

"Therapeutic abortion is practically never indicated in affective illness, and perhaps rarely in schizophrenia. It is usually risky in cases of obsessional disorders and in types of personality where severe guilt reaction is likely to follow. It is often indicated for women with poor resistance to stress, but the whole life situation must be carefully considered. Social aspects will always enter into such decisions."

Dr. Anderson thus concludes that "it is idle to suppose the final decision (to abort) will be made on the pure medical indication alone, abstracted from all other considerations."

What Is "Health"?

Many psychiatrists argue that socioeconomic pressures and humanitarian concepts are inseparable elements of psychiatric disturbances. Some probably would tend to the same definition of "health" as that expressed in the Constitution of the World Health Organization—"a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

In actual practice, however, one of the principal criteria for psychiatric referral for abortion is the likelihood of suicide. Since potential self-destruction is an obvious threat to the mother's life, such an indication apparently qualifies the procedure under state laws which permit abortion only to save the life of the mother.

The arguments against possible suicide—the most potent of the psychiatric indications for abortion—as a valid medical reason to terminate pregnancy are, however, strong ones.

Suicide in Pregnancy

A number of studies have shown that pregnant women rarely take their own lives. The Minnesota Maternal Mortality Study, covering 1950-64, revealed 14 suicides in obstetric patients. The ratio was one suicide per 88,035 live births—considerably below the suicide rate in the general population.

None of these 14 Minnesota women was illegitimately pregnant or had requested a therapeutic abortion. Further, 10 committed suicide after delivery and only 4 before delivery.

During a seven-year period in Birmingham, England, no pregnant woman took her life. A three-year study of a 3-country area in California with a population of 10 million revealed only 3 pregnant women had committed suicide. None of 304 European women refused a therapeutic abortion committed suicide, although 62 had indicated they would do so.

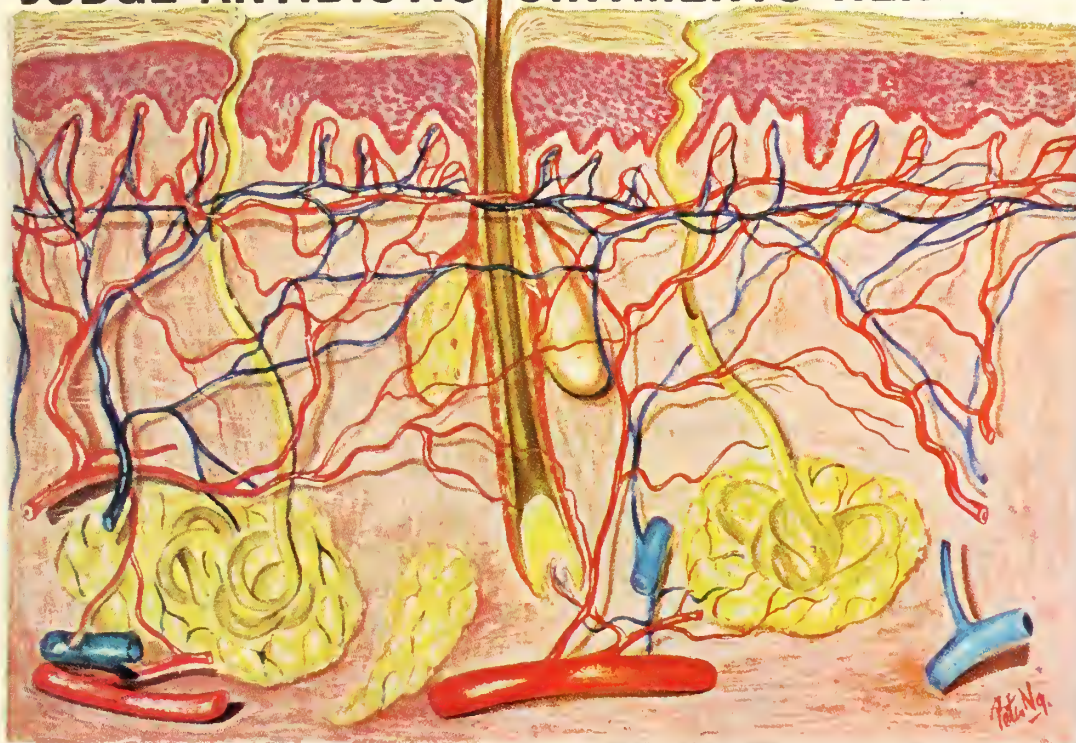
Dr. Harold Rosen, associate professor of psychiatry at Johns Hopkins University, admits that suicide in pregnancy is less than in the general population "but it does occur and sometimes the mother kills her other children before she destroys herself."

Not a Medical Problem

"Every argument against a more liberal approach to therapeutic abortion," Dr. Rosen

(Continued on Page 1516)

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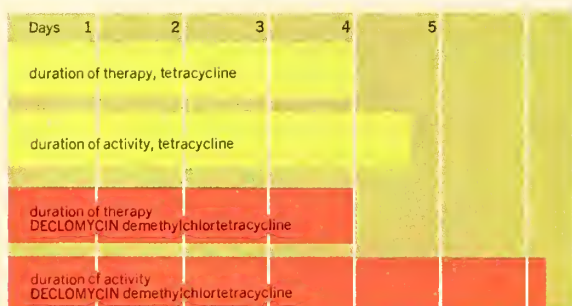
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Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essen-

tial. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

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Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.



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(Continued from Page 1510)

emphasizes, "is based on religious and ethical considerations. The problem is not a medical one; it is one of ethics and religion."

Dr. Rosen points out that the only medical indication for any given procedure in any century has been its potential benefit to the patient. "Attempts to find specific conditions for therapeutic abortion are confused by ethical and religious considerations and a legal maze."

If the removal of a patient's gallbladder or kidney will cause less trauma than saving the organ, then it's removed, he said. "If removal is more traumatic, it isn't done."

The same medical considerations should apply in therapeutic abortion, Dr. Rosen feels.

"If the pregnancy will cause more trauma than its termination, then it should be interrupted," he said. "And trauma can be of many kinds, including emotional."

Changing Times

Dr. Alan F. Guttmacher, president of Planned Parenthood-World Population, noted in the March issue of *New York Medicine* that "four or five generations have been born and many medical and social changes have occurred in the interval," since the New York abortion statute was enacted in 1828.

The New York law makes abortion a crime unless it is necessary to save the life of the mother or the child.

"... It is inconceivable to me," Dr. Guttmacher emphasized, "in view of the advances made in anesthesia, asepsis, oxytocics and overall surgical competence, that today any lawmaker writing de novo an abortion statute would make the only legal exception preservation of life, thus exempting as exceptions health, quality of offspring and the socio-legal situation under which impregnation took place."

Rubella and Abortion

A substantial percentage of therapeutic

abortions are performed for fetal indications. In fact, the current movement to liberalize abortion laws received much of its momentum from the rubella epidemics of the early 60s and from the thalidomide episodes.

The woman faced with the possibility of bearing a malformed baby raises emotionally-charged reactions. Some physicians who would like to add possible fetal damage to the list of legal indications for abortion, however, consider it primarily a medical problem and cite numerous statistics to back their position.

The risk of fetal defects from rubella was shown in one clinical study to be 47% during the first month of pregnancy, 22% in the second, and 7% in the third. The products of conception were affected eight of ten times in another study of abortions performed for rubella during the first few weeks of pregnancy.

"To the estimates of defects manifest at birth," states an editorial in *California Medicine*, "must be added an increment estimated at 50% for defects discovered later, notably deafness which may not be discovered and properly dealt with until the school years."

The element of probability is thus inherent in abortions for possible fetal damage. If rubella is accepted as an indication for abortion and if the statistics are correct, then 2 of every 10 unborn children destroyed would have been normal.

However, Dr. J. L. McKelvey, head of the Department of Obstetrics and Gynecology at the University of Minnesota, cites studies showing the real risk of one or more severe, disabling lesions in the surviving child of a woman with rubella in the first trimester is only 7 to 10%.

Dr. McKelvey notes, however, that the risk to the fetus seems to vary in different rubella epidemics.

The Probability Problem

"Do I," Dr. McKelvey asks in an issue of *Minnesota Medicine* devoted largely to therapeutic abortion, "have the right to kill a con-

siderable number of developing humans who are normal in order to get rid of the painful problems of the occasional child who is born alive with an abnormality which may be minor or severe?"

"Do I indeed," Dr. McKelvey further asks, "have the right to kill a human, developing or developed, because it has an abnormality?"

"It is perhaps absurd to suggest a compromise. If one believes that he is justified in destroying a child because it has an abnormality, would it not be better to give legal blessing to waiting until the babies are born at term, letting those who are normal survive and handling the abnormal ones with a hammer since they are now too big for a curet?"

Dr. McKelvey considers this a horrible thought but, he asks, "Isn't it really more sensible and humane than indiscriminate destruction of the normals and abnormals, the so-called King Pharaoh technique? If I were a normal fetus at risk, I should certainly think so."

Is the Fetus a Person?

One of the arguments against the destruction of a potentially damaged fetus is based on the legal rights of the unborn.

Some legalists point out that the 14th Amendment to the Constitution proclaims that no State shall "... deprive any person of life . . . without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws."

The key question here, of course, is whether the fetus is a "person." At least one high judicial body apparently thinks it is.

The New Jersey Supreme Court ruled, 4 to 3, on March 6 that a child, however defective and mentally retarded, has a right to live. This right, the court said, is paramount to any right presumed by the parents to destroy him.

Dr. Donald H. Russell, director of the Law-

Medicine Institute of Boston University, said the law tends to hold that existence as a person begins at conception.

However, laws pertaining to the rights of the fetus are somewhat contradictory. Herman Schwartz, professor of law at the State University of New York at Buffalo, said the law does not treat the fetus in its early months as a person.

Mr. Schwartz points out that "no death certificate is necessary when the fetus is aborted and it has no legal rights of inheritance until and unless born."

On the present situation, Mr. Schwartz told a Conference on Fertility and Contraception held in Buffalo, "... it is clear that if the fetus is a human being, we have already rejected the basic premise that an innocent human being cannot be sacrificed for someone else—almost every single state allows destruction of the fetus to save the life of the mother."

"The question," Mr. Schwartz emphasized, "is therefore not Whether but When."

Scoring abortion laws as "cruel, humiliating, and self-defeating," Mr. Schwartz said, "Our treatment of abortion is . . . one more example of social hypocrisy—legal condemnation which appeases our Puritanism, and silent non-enforcement, which accepts the realities."

Due Process for the Fetus

If the fetus is, indeed, a person and thereby entitled to protection under the "due process" clause of the Constitution, then laws permitting therapeutic abortion for reasons other than to save the mother's life might be held unconstitutional.

The Rev. Dexter J. Hanley, a noted Jesuit lawyer of Georgetown University in Washington, D. C., feels that any rights of the fetus under "due process" would be subordinate to the right of the mother to life.

Fr. Hanley said, however, that the New Jersey decision could be the basis of a test

of the constitutionality of some therapeutic abortions.

"It is not inconceivable," he said, "that the Supreme Court may be called upon to decide the question of when life begins and at what point the fetus becomes a person."

The Roman Catholic Stand

The Roman Catholic Church has pretty much solved the problem of therapeutic abortion for its hospitals and for those physicians who follow its tenets. It simply forbids therapeutic abortion, per se, for any reason.

This is not to say that pregnancy can never be terminated under Roman Catholic law. It can be. But the key to such a termination lies in the phrase "direct abortion."

The Rev. Walter LeBeau, who conducts a course in medical ethics for premedical students at the College of St. Thomas in St. Paul, Minn., points out that Roman Catholic dogma permits abortion "when it is the indirect result of a procedure necessary at the time to save the mother's life."

While the Roman Catholic Church has been in the forefront of those who oppose more liberal laws on abortion, it does not stand alone. A number of prominent Jewish and Protestant theologians are on record against liberalization. But, equally well-known non-Roman Catholic clergymen strongly favor easing existing laws.

With no central authority equivalent to the Vatican to establish dogma, Protestant and Jewish physicians generally must rely for religious guidance on abortion on their personal convictions and on whatever doctrines their individual denominations may have established.

The Final Solution

Therapeutic abortion is a multifaceted problem. Pat solutions obviously are not forthcoming. Nor will the ultimate resolution be made by physicians, theologians, sociologists, biologists, lawyers, or philosophers.

It will be made by the public.

As an editorial in the Dec. 12, 1966, *National Observer* put it: "The solution . . . will be a distinctly political one—in the best sense of that word—and will be reached by legislators responsive to the public."

The role the physician will play in society's achievement of that solution is yet to be determined.

Poll On Therapeutic Abortion

Tabulation and Report by Research Department, *Modern Medicine*.

Are you in favor of liberalizing the existing laws on Therapeutic Abortion?

BY STATE AND REGION

State	Yes %	No %
Connecticut	87.9%	12.1%
Maine	84.6	15.4
Massachusetts	83.1	16.9
New Hampshire	88.5	11.5
Rhode Island	79.4	20.6
Vermont	91.1	8.9
NEW ENGLAND REGION	85.1%	14.9%
New Jersey	89.7%	10.3%
New York	90.6	9.4
Pennsylvania	87.4	12.6
MID EASTERN REGION	89.5%	10.5%
Delaware	94.4%	5.6%
Washington D. C.	89.1	10.9
Florida	91.0	9.0
Georgia	92.9	7.1
Maryland	86.7	13.3
North Carolina	93.2	6.8
South Carolina	79.1	20.9
Virginia	90.1	9.9
West Virginia	83.2	16.8

ABORTION: THE DOCTOR'S DILEMMA

SOUTH ATLANTIC REGION

	90.0%	10.0%
Illinois	83.2%	16.8%
Indiana	83.1	16.9
Michigan	85.0	15.0
Ohio	82.7	17.3
Wisconsin	73.3	26.7

GREAT LAKES REGION

	82.3%	17.7%
Alabama	88.4%	11.6%
Kentucky	85.7	14.3
Mississippi	78.8	21.2
Tennessee	88.3	11.7

MID SOUTH REGION

	86.3%	13.7%
Iowa	83.1%	16.9%
Kansas	80.5	19.5
Minnesota	76.4	23.6
Missouri	83.7	16.3
Nebraska	71.6	28.4
North Dakota	80.9	19.1
South Dakota	69.3	30.7

PLAINS REGION

	79.6%	20.4%
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Arkansas	89.0%	11.0%
Louisiana	72.7	27.3
Oklahoma	87.1	12.9
Texas	88.6	11.4

SOUTH WEST REGION

	86.2%	13.8%
Arizona	78.0%	22.0%
Colorado	87.7	12.3
Idaho	92.2	7.8
Montana	72.9	27.1
Nevada	90.2	9.8
New Mexico	88.2	11.8
Utah	89.6	10.4
Wyoming	76.6	23.4

ROCKY MOUNTAIN REGION

	85.3%	14.7%
California	92.2%	7.8%
Oregon	86.5	13.5
Washington	86.2	13.8
Hawaii	81.0	19.0
Alaska	86.0	14.0

FAR WEST-PACIFIC REGION

	91.0%	9.0%
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State not determined	87.6%	12.4%
TOTAL PHYSICIANS	86.9%	13.1%

Skiers Beware

Sunburn and the slalom frequently go together, according to the AMA's Committee on Cutaneous Health and Cosmetics. Skiers sometimes are sunburned worse than sunbathers, due principally to the fact that at high altitudes the amount of atmosphere through which the ultraviolet rays must travel is considerably reduced. Smoke and smog are markedly decreased. Fortunately, a number of sunscreening agents afford protection. These include preparations containing benzophenones and others consisting of 15% aminobenzoic acid in a cream base. Many are packaged small enough to fit in a parka pocket. Frequent reapplications, especially to the nose and lips, are important because perspiration, rubbing and tumbles in the snow cause these preparations to come off.—*J. A. M. A.*, Jan. 2, p. 10.

Mercury Vapor Common Problem

Mercury vapor from small droplets of the liquid metal trapped in cracks, benches and floors is a common problem in many laboratories and industries and presents a potential health hazard. A New Zealand study of eight fixing agents, reported by Dr. J. F. Copplestone and D. A. McArthur, B. Sc., showed that a sulfur calcium oxide and water mixture was the most successful method for fixing the droplets. Another convenient technique, particularly suitable for mercury in inaccessible crevices, is the use of an aerosol hair spray.—*Arch. Environ. Health*, November, p. 676.

INDEX

THE JOURNAL OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Volume 36

July 1966-June 1967

Explanatory Notes

Arrangement of Index

- I. Authors
- II. Titles
- III. Association Forum
- IV. Alabama Department of Public Health

I. AUTHORS

B.

- Ball, Gene V., M. D.—The "Modern" Management of Primary Gout, 48
- Bentley, Herschel P., Jr., M. D.—Neonatal Mortality, 377

C.

- Cain, Walter S., M. D.—Neonatal Hirschsprung's Disease: An Often Delayed Diagnosis, 41
- Carmichael, Emmett B., M. S., Ph. D.—William McFarland Boling—Physician-Teacher, 529
- Cassady, George, M. D., Paul McCain, M. D., and Betty Vaughn, M. D.—Management of the Rh Problem, 537
- Cassady, George, M. D. and Brakefield, William, M. D.—Successful Transuterine, Intraperitoneal Fetal Transfusion—Report of a Case, 1093
- Cheraskin, E., M. D., D. M. D.; Ringsdorf, W. M., Jr., D. M. D., M. S.; Setyaadmadja, A. T. S. H., M. D., and Barrett, R. A., D. D. S.—Clinical Chemistry and Predictive Medicine, 1337
- Cruit, Robert Lawrence, M. D.—Use of Colon for Esophageal Replacement, 1211

F.

- Foster, Glenn L., M. D., Casten, Gus G., M. D., and Reeves, T. J., M. D.—"Cardiac Resuscitation," 797
- Frommeyer, Walter B., Jr., M. D.—Cancer: Some Thoughts on Its Etiology, 935

G.

- Galbraith, J. Garber, M. D.—Stroke Mechanism in Carotid Occlusive Disease, 1077

H.

- Halsey, James H., Jr., M. D.; Raffel, Sherman C., Ph. D.; and Lampton, Theodore D., M. D.—The Epidemiology of Carotid Stenosis, 1081
- Hammack, William J., M. D.—Perspectives in Cancer, 939
- Heller, John R., M. D.—Progress in Cancer Research and Control, 521
- Holleman, Barbara H., R. N., B. S.; Klingler, Harold, M. D., FACS, FICS, FACOG—Alabama Infant Mortality, 824
- Hughston, Jack C., M. D.—Knee Ligament Injury in Athletes, 243

J.

Jaekle, Charles E., M. D.—Ophthalmological Services In A Changing World, 382

K.

Kirschenfeld, J. J., M. D.—Physical Aspects of Aging, 1473

L.

Lynn, Hugh B., M. D.—Congenital Anomalies in the Newborn Period, 1229

M.

Murdock, Church E., Jr., M. D., FACS; Wiseman, Hollis J., M. D., FAAP; and Harris, Robert O., III, M. D., FAAP—"Closed" Heart Surgery in Infants and Children, 671

P.

Pennington, W. S., M. D.—Epidemic of Tinea Capitis in Elementary School, 1357

S.

Schultz, F. Bernard, M. D.—Clinical Study of the Antihypertensive Effects of Debrisoquin Sulfate in Combination with Hydrochlorothiazide, 147

Scott, Wendell G., M. D.—Preventable and Avoidable Cancers and Cancers Arising from Personal Indifference, 252

Simpson, Wyatt C., M. D., FACS—Selection of Operation for Duodenal Ulcer—Gastric Resection Vs. Vagotomy and Pyloroplasty, 807

T.

Tieszen, Ralph L., Sr., M. D.; Watkins, Phillip C., M. D.; and Bryan, Robert M., M. D.—Cardiac Resuscitation in a Community Hospital, 1341

Tysinger, Donald S., Jr., M. D.—Clinical Oxygen and Patient Relationship, 1467

W.

White, Jerre R., M. D.—Prophylactic Control of Angina Pectoris; Double-Blind Study of Prolonged Release Nitroglycerin, 667

Williams, Ralph C., M. D.—William H. Sanders, M. D., Early Leader in Medical Education and Public Health Work in Alabama, 139

Woodruff, C. Roy, Th. D.—The Dynamics of Counseling in Medical Practice, 1215

II. TITLES

A.

Alabama Infant Mortality (Holleman, Klingler) 824

B.

Boling, William McFarland—Physician-Teacher (Carmichael) 529

C.

Cancer: Some Thoughts on Its Etiology (Frommeyer) 935

"Cardiac Resuscitation" (Foster, Casten, Reeves) 979

Cardiac Resuscitation in a Community Hospital (Tieszen, Watkins, Bryan) 1341

Clinical Chemistry and Predictive Medicine (Cheraskin, Ringsdorf, Setyaadmadja, Barrett) 1337

Clinical Oxygen and Patient Relationship (Tysinger) 1467

Clinical Study of the Antihypertensive Effects of Debrisoquin Sulfate In Combination with Hydrochlorothiazide (Schultz) 147

"Closed" Heart Surgery in Infants and Children (Murdock, Wiseman, Harris) 671

Congenital Anomalies in the Newborn Period (Lynn) 1229

D.

Dynamics of Counseling in Medical Practice, The (Woodruff) 1215

E.

Epidemic of Tinea Capitis in Elementary School (Pennington) 1357

Epidemiology of Carotid Stenosis, The (Halsey, Raffel, Lampton) 1081

K.

Knee Ligament Injury in Athletes (Hughston) 243

M.

Management of the Rh Problem (Cassady, McCain, Vaughan) 537

"Modern" Management of Primary Gout, The (Ball) 48

N.

Neonatal Hirschsprung's Disease: An Often Delayed Diagnosis (Cain) 41

Neonatal Mortality (Bentley) 377

O.

Ophthalmological Services In A Changing World (Jacckle) 382

P.

Perspectives in Cancer (Hammack) 939

Physical Aspects of Aging (Kirschenfeld) 1473

Preventable and Avoidable Cancers and Cancers Arising from Personal Indifference (Scott) 252

Progress in Cancer Research and Control (Heller) 521

Prophylactic Control of Angina Pectoris; Double-Blind Study of Prolonged Release Nitroglycerin (White) 667

S.

Sanders, William H., M. D., Early Leader in Medical Education and Public Health Work in Alabama (Williams) 139

Selection of Operation for Duodenal Ulcer—Gastric Resection Vs Vagotomy and Pyloroplasty (Simpson) 807

Stroke Mechanism in Carotid Occlusive Disease (Galbraith) 1077

Successful Transuterine, Intraperitoneal Fetal Transfusion—Report of a Case (Cassady, Brakefield) 1093

U.

Use of Colon for Esophageal Replacement (Cruit) 1211

III. ASSOCIATION FORUM

Called Meeting of Counsellors and Delegates Attracts Biggest Crowd in MASA History 733

Changes at Medical Center, 1372

Citizenship, Citizens and Circumstance, Neal S. Flowers, M. D., 1403

Code-a-Phone Available, 1371

Dr. Paul Mertins Named to Board of Trustees, 351

Emit Luther McCafferty, Jr., President-Elect of MASA, 1370

Guidelines for Orientation of New Members, 956

Impact of Titles 18 and 19, 964

1967 National Medico-Legal Symposium, T. B. Hill, Jr., Montgomery, 1374

New Censors Tour Health Department, 76.

Report on Actions of the House of Delegates AMA 20th Clinical Convention, 950

Patterson New Director; Ingram Joins Staff, 352

Resist Bureaucratic Control—Governor Wallace Urges, 1487

Transactions of the Called Meeting of November 6, 1966, 1105

IV. ALABAMA DEPARTMENT OF PUBLIC HEALTH

A State Health Department Program in X-ray Protection, Ira L. Myers, M. D., M. P. H., F. A. P. H. A., Montgomery, 874

"Environmental Pollution Problems in Alabama—Water and Air," Ira L. Myers, M. D., Montgomery, 1246

Field Testing Program for Carbon Monoxide, 1494

More Physician Direction Achieved, 454

Packaged Disaster Hospitals, 163

Pollution of a Vital Resource, Catherine G. Lamar, Montgomery, 1361

Safest Place in World to Have A Baby—Alabama?, H. H. Klingler, M. D., FACS, FICS, FACOG, Montgomery, 68

The Hospital and Safety, Clay H. Dean, 989

The Physicians' Role in Abating Drug Addiction, 565

The Role of Primary Prevention in Public Health, E. G. McGavran, M. D., M. P. H., Chapel Hill, North Carolina, 1130

Twenty Years of Hill-Burton Program, 290



The Month in Washington

From the Washington Office
American Medical Association

Washington, D. C.—The American Medical Association proposed that Congress set up a National Commission on Health Resources and Medical Manpower with broad powers to supervise the drafting of physicians for military service.

The AMA recommendation was presented by Dr. Albert H. Schwichtenberg, chairman of the AMA Council on National Security, at a Senate Armed Services Committee hearing on S. 1432 which would provide for a four-year extension of the present draft law expiring June 30.

Other AMA recommendations for modification of the doctor draft program included:

—Expansion of the physician draft pool to include women doctors.

—Making subject to draft call foreign physicians under 35 years of age, with permanent visas or who have subsequently become citizens, and who may not be subject to call because they were not deferred from induction while under age 26.

—Limiting credit for fulfillment of the draft obligation to only service performed in the armed services. (Under the old law, service in the Public Health Service could satisfy a physician's obligation for active military duty.)

—Routine transfer, upon completion of an internship, of the jurisdiction of physicians

to the local draft board serving the area in which the physician is engaged in training or practice.

—Changes in the pay and promotion policies for military physicians designed to increase the retention of career military physicians.

"Our primary recommendation . . . is the creation of a National Commission on Health Resources and Medical Manpower," Dr. Schwichtenberg said. "This Commission would replace and be responsible for the functions of the present National Advisory Committee and the Health Resources Advisory Committee. This new Commission, under the direction of the President, would have the responsibility of maintaining a proper balance of health personnel, within existing resources, among the Armed Forces, other Government agencies, and the civilian population. Requests of the Secretary of Defense for health manpower in the military would be reviewed and approved by the Commission. The Commission would establish for the Selective Service System criteria for classifying, reclassifying and determining the order of selection for health personnel. Under this proposal, the present State Advisory Committees would be redesignated as State Health Manpower Committees, whose activities would be coordinated by the National Commission. It is further recommended that the Commission should be constituted from among persons of outstanding national reputation in the health-care fields, and its composition should include substantial representation from physicians in private practice."

* * *

The National Highway Agency announced tentative standards for emergency medical services provided for persons injured in traffic accidents.

The federal standards give the states broad authority in implementation and also are subject to comment by the states before they become final. The state programs must be in full operation before Jan. 1, 1969, or a

state could lose up to 10 per cent of its allotted federal highway construction funds.

Although the federal standards apply only to traffic accidents, they are expected to necessarily set a pattern for emergency medical services generally.

Dr. William Haddon, Jr., head of the National Highway Safety Agency, said the emergency care regulations are designed to provide quick response to accidents, sustain and prolong life through proper first aid measures, reduce the likelihood of permanent disability and prolonged hospitalization, and provide speedy transportation of accident victims to hospitals.

The federal standards would require states to:

—Appoint a full-time medical emergency services coordinator to have primary responsibility for the program.

—Prepare a comprehensive plan for emergency services throughout the state.

—Establish training, licensing and related requirements for ambulance drivers, attendants, and dispatchers.

—Coordinate ambulance and other emergency medical care systems, including requiring ambulances to carry two-way radios

hooked up with the police and hospitals.

—Provide first aid training and refresher courses for emergency service personnel and policemen and firemen, and encourage first aid instruction for the public.

Other draft regulations with medical aspects:

—Make physical and eyesight examinations for driver licensing.

—Do compulsory blood tests for alcohol on drivers in accidents.

* * *

Dr. John C. Nunemaker, chairman of the American Medical Association's Department of Graduate Medical Education, told a House Judiciary Subcommittee that the AMA's position continues to be that graduates of foreign medical schools who come to the United States for training "should be encouraged in every possible way to return to their home countries where their skills are so badly needed."

Dr. Nunemaker suggested that the five-year length of stay provision for physicians on exchange programs be reconsidered. Every year beyond two or three years "intensifies the desire of the visitor to stay longer," he noted.

Toothbrush Bristles Dangerous

An inhaled toothbrush bristle can cause inflammation, sore throat and persistent discomfort, according to Dr. D. J. Burray-Bruce of London. In one instance, he reported, a patient achieved a cure by swallowing a piece of crust attached to a nylon cord—by pulling on the cord and withdrawing the crust he managed to dislodge the offending bristle. Under normal circumstances the bristles of a new toothbrush should not come out, but if a brush is placed in hot water the bristles swell and may then burst out of their holes. Older bristles may break off.—*Lancet*, Dec. 3, p. 1255.



"We do not, Miss Smith, call afflictions of the colon 'colonial.'"

Reprinted from *The New Physician*

AMA Committee On Nursing To Meet October 6, Chicago

State medical societies will be given the opportunity to share their experiences in the area of physician-nurse liaison activities on the state level at a nursing conference this fall. The conference, sponsored by the AMA Committee on Nursing, will be held in Chicago, October 6, at the AMA headquarters.

Attending representatives will review the purposes, activities and goals of organized nursing as well as the functions, objectives and activities of the AMA Committee on Nursing. The Committee hopes the conference will provide information which will serve as a guide in the future development of its program.

State medical societies have been invited to appoint a representative, knowledgeable in the field of nursing, to the conference. Each representative's travel expenses will be assumed by the AMA.



"Well, it's no wonder you have insomnia lying there awake all night!"

Reprinted from **Nebraska Medical Journal**

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tients are accepted and departmentalized care is provided according to sex and the degree of illness.

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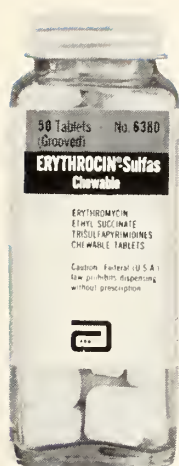
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Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN-SULFAS Chewable

(Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

1. Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
2. Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.

ERYTHROCIN-SULFAS Granules

(Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief Summary on next page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



Self-Help Training Program

Disasters can take many shapes—a devastating hurricane, an automobile accident, an enemy attack. We are still learning how to avoid disasters; we know how to prepare for them.

Thousands of Alabamians are learning to survive and recover in the event of nuclear or natural disaster by enrolling in the Medical Self-Help Training Program.

The purpose of the Medical Self-Help Training Program is to prepare people for survival in time of man-made or natural disaster when the services of a physician or allied health personnel are not available for a number of days or weeks. The free 16-hour course outlines protective procedures against radioactive fallout and is directed toward predisaster planning and postdisaster invention. Students are taught the techniques of mouth-to-mouth resuscitation, and methods of stopping bleeding, applying bandages, and treating fractures, dislocations, and sprains. Students learn how to care for the sick and injured and methods for infant and child care in disaster situations. Information on the treatment of burns and shock is also provided.

For the past three years Alabama has consistently ranked among the top ten states in the nation in the number of individuals trained in Medical Self-Help. One hundred, forty thousand citizens have been trained through courses offered in all 67 counties.

This program is administered at the state level by the Alabama Department of Public Health. County health departments, in cooperation with local civil defense offices, administer the program at the county level.

Developed approximately three years ago by U. S. Public Health Service with the cooperation of the Office of Civil Defense, the Medical Self-Help Training Program has received the endorsement of the American Medical Association and many other national health organizations.

AMA To Publish Nutrition Book

Your patients' misconceptions about nutrition can be easily rectified with answers from a new book soon to be published by the AMA.

"Let's Talk About Food" covers such main topics as nutritional definitions, adequate diet, weight control, foods and their composition, effects of foods on the body, food preparation, food preservation and storage, and food additives.

This informative booklet, designed for the layman, is written in question and answer form. It contains understandable, but medically precise answers to such questions as: "Do certain cuts and varieties of meat contain more protein, fat, vitamins and minerals than others?" "Is it true that margarine has fewer calories than butter?" "What is the composition of condensed milk?" "If milk is disliked, is it possible to obtain a balanced diet without it?"

The main purpose of the reference book is to "provide information, primarily to the homemaker, on the importance of foods and to advise her of any adverse properties of foods," Philip L. White, Sc. D., says.

Dr. White, director of the AMA Department of Foods and Nutrition, and, secretary of the AMA Council on Foods and Nutrition, has been with the AMA for ten years. He received a B. S. degree from Pennsylvania State University, an M. S. from Iowa State University and his doctorate from Harvard University. Before coming to the AMA he worked four years in Peru.

The material for the book is taken largely from his "Let's Talk About Food" column which has appeared monthly in *Today's Health* magazine since May, 1960.

Single copies are available through the AMA at \$1.20 in the U. S. and its possessions, Canada and Mexico and \$1.50 elsewhere. A 70-cent rate is available to medical students, hospital interns and hospital residents.

Sparkling Soft Drinks . . .

pleasure for patients who need liquids



Soft drinks are welcomed by patients on a liquid diet and by those who need additional fluids to maintain bodily functions. Since the amount of liquids is so important, flavorful soft drinks are often recommended. Carbonated beverages are useful for replenishing liquids when fever is present or when other foods and beverages cannot be tolerated. There's a psychological advantage, too—patient is happy to follow doctor's orders when they are so pleasant and enjoyable. Write for "Sparkling Soft Drinks" and "Liquids for Living."

Alabama Soft Drink Association

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Montgomery, Alabama 36103

Facts on Quacks

"Facts on Quacks," a complete source book touching every aspect of health quackery, is now off the presses, the American Medical Association has announced.

Having been in development for 18 months, the new publication is considered a major instrument in the AMA's program of educating the public to the evils of quackery. It is especially designed for medical society use in their anti-quackery programming.

Publication of "Facts on Quacks" marks the first time in history that information on all types of quackery has been consolidated into one book.

The 32-page, two-color, illustrated booklet, written in question and answer form, is beamed at the public and covers facts on health quackery in such fields as arthritis and rheumatism, cancer, nutrition and weight reduction, over-the-counter drugs, alcoholic nostrums, health books and pamphlets, epilepsy, mental health and retardation, cosmetics, baldness, rejuvenation and sex stimulants. One section advises the reader what he should do if he suspects health quackery activities in his community.

"Never before has there been any book like this," Doyl Taylor, director of the AMA Department of Investigation, says. "It should

be placed in every reference library in the country and certainly in every medical library. Every local medical society should see to it that a copy is in each of their local libraries and individual physicians should place copies in their waiting rooms."

"Facts on Quacks" is being published by the AMA in full cooperation with various governmental and voluntary agencies in the health field such as the National Health Council, the Food and Drug Administration, the National Better Business Bureau, the Post Office Department, the Federal Trade Commission, the American Cancer Society, Inc. and The Arthritis Foundation.

Requests for "Facts on Quacks" should be directed to the Order Department. Single copies, 30¢; 50-99, 28¢; 100-499, 25¢; 500-999, 23¢; 1,000-over, 20¢.

BUREAU OF LABORATORIES

Thomas S. Hosty, Ph.D., Director

APRIL 1967

Examination for Intestinal Parasites	1,843
Examination for Malaria	3
Salmonella & Shigella (blood-feces-urine-food)	260
Examination for tubercle bacilli	4,237
Examination for gonococci	2,201
Serological test for syphilis	26,051
FTA	60
Darkfield	0
Brucella	0
General Bacteriology (cultures for isolation and confirmation)	79
Staphylococcus (cultures for isolation and confirmation)	154
Examinations for diphtheria	1
Streptococci examinations	2,052
Mycology	15
Agglutinations	7
Vincent's infection	1
Complement fixation tests	154
Test for Phenylketonuria (PKU)	6,205
Cytology	792
Water examinations	3,111
Milk and dairy products examinations	4,805
Sea food examinations	154
Examination for Negri bodies (smears & animal inoculation)	446
Virology	57
Rh Factor bloods	680
Miscellaneous	517
TOTAL	53,885

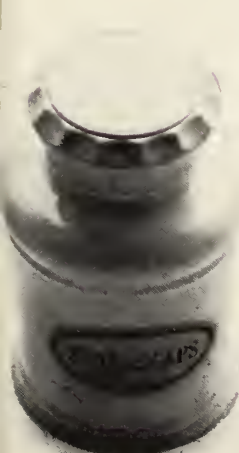
Reduce Waist Lines

Jogging one or more miles a day, three times a week for 12 weeks, can reduce waist lines by 1½ inches and lower blood pressures in sedentary mature men, according to a study of 265 white-collar workers reported by Dr. W. E. Harris of Eugene, Ore. 179 men who were overweight lost an average of 7.8 pounds. The particular advantage of combining walking and running as a form of regular exercise, Dr. Harris said, is that the degree of exertion can be varied according to individual abilities. What is more, jogging is convenient and inexpensive.—*J. A. M. A.*, Dec. 12, p. 50.



after surgery

B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.



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Stress Formula Vitamins Lederle

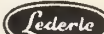


Each capsule contains:

Vitamin B ₁ (Thiamine Mononitrate)	10 mg
Vitamin B ₂ (Riboflavin)	10 mg
Vitamin B ₆ (Pyridoxine HCl)	2 mg
Vitamin B ₁₂ Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York



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at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food^{1,3}

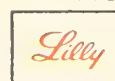
Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.^{1,2} Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.^{1,3}

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of

staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Ilosone®
Erythromycin Estolate



(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone. **Contraindications:** Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with pre-existing liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to

be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalofluorescence and thymol turbidity tests, elevated serum glutamate oxalacetate transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has been reported in other patients taking prolonged courses of medication. Patients with chronic infection have been given 1 to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of the patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months for rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevations of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticarial skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®

Ilosone Chewable Tablets

Ilosone Drops

Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc. size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: *Am. J. M. Sc.*, 247:69, 1966.
2. Griffith, R. S., and Black, H. R.: *Antibiotics & Chemother.*, 12:398, 1966.
3. Hirsch, H. A., Pyles, C. V., and Finland, M.: *Am. J. M. Sc.*, 239:198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

Pregnant Women Should Wear Seat Belts

"... a pregnant woman should definitely use an automobile seat belt the same as anyone else."

This statement was developed by the AMA Committee on Medical Aspects of Automotive Safety at its Chicago meeting in February.

The statement continues: "The Committee believes that with such use, both the pregnant woman and the fetus are safer, provided the belt is worn as low on the pelvis as possible. The use of a shoulder strap in addition provides an extra safety factor."

This statement is merely a committee reply to a question and is not necessarily official AMA policy.

Penalties For Over-Due Accounts Unsuitable

Charging penalties for over-due accounts is unsuitable in the medical profession in the opinion of the AMA Judicial Council.

In a decision made last fall (November 26) the Council stated: "Since the practice of medicine is a profession and not a business, the practices adopted by businesses are not necessarily suitable for professional practice.

"It is not in the best interest of the public or the profession to charge interest on an unpaid bill or note or to charge a penalty on fees for professional services not paid within a prescribed period of time, nor is it proper to charge a patient a flat collection fee if it becomes necessary to refer the account to an agency for collection."

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Insulin coma, electroshock and psychotherapy are employed. The institution is equipped with complete laboratory facilities, including electroencephalography and x-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin, Jr., M. D.
Robert A. Griffin, M. D.

Mark A. Griffin, Sr., M. D.
Mark A. Griffin, Jr., M. D.

AMA Archive-Library

A young intern, hoping to practice medicine in East Africa after receiving his license, wants to correspond with medical people already practicing there and needs names and addresses. He writes to the American Medical Association Archive-Library for assistance.

A doctor, well established in a practice he has maintained for twenty years, finally gets the opportunity to take his wife on their dream tour of Europe. They will be in Switzerland in July. He wonders if there will be any medical meetings he can attend in Switzerland during their visit. He writes to the Archive-Library for information.

A general practitioner has a patient, a 17-year-old girl, who is planning to attend a year of school in Guatemala. She is a potential surgery patient. He is concerned about the type and quality of medical service available in the region. He writes to the Archive-Library for help.

You could be any one of these AMA members who benefit from the services of the AMA Archive-Library, just one dividend of your AMA membership. The Archive-Library services to members include conducting medical literature searches and compiling bibliographies free of charge. Another available aid of great value, the Library's photocopy service, is also free to you. Any article from any journal to which the Library has access can be copied and sent to you for your files.

The Library handles from 1,500 to 1,800 requests similar to those above for information and publications from physician members every month.

Questions and requests may range from the treatment of chlorine inhalation or statistics on human longevity to the latest treatment for Scleroderma or Raynaud's Disease to plans for the mass treatment of large numbers of burned patients.

The AMA Archive-Library upholds the

traditional role of the medical library as an adjunct to the postgraduate education of the physician in practice, but it is even more than a library. It is a complete information center.

As a national medical society library, the Archive-Library is able to provide services not normally available on the local level. A more complete collection of materials allows the Library to supplement local library service. In addition, several special subject collections cover thoroughly such topics as international health, history and the sociology and economics of medicine. The AMA's collection on the sociology and economics of medicine is the best in the world. It contains almost all the English language publications and includes opinions reflected in mass media as well as in scholarly works.

At the core of the Library is a collection of current medical publications. Today, 2,200 journals are received on a regular basis. This is twice the number contained in any average medical school library. These represent all the major publications in medicine and the allied sciences. In addition to the periodicals, the Library contains 40,000 books. This makes the Archive-Library one of the most complete current medical libraries you will find any place.

Of course your needs and requests determine the Library's content. The quantity and type of periodicals and reference books contained in the Library are guided by your requirements and those of the AMA staff.

Perhaps the one thing above all others which sets the AMA medical Library apart and makes it a true information center is the availability to the Library staff of a unique resource unavailable at many other medical libraries—the professional staff members of the AMA's 20 scientific departments. "The professional staff is here and we can use them," Susan Crawford, director of the Archive-Library, says. "Few other libraries have this type of consultation avail-

able. When a doctor writes to us and wants medical opinion or judgment, his question is referred to a consultant on the AMA staff, or to one of many specialists in the country, through the Questions and Answers Department of JAMA."

Such referrals are made in numerous areas such as medical physics, cardiology, psychiatry and drug therapy. Physicians on the AMA staff evaluate information for you before it is ever delivered.

For example, a question on drugs which requires clinical and pharmacological judgment is routed to the AMA's Department of Drugs. The staff in that department can research all available material on the subject and isolate the exact information you need.

The 26 members of the Archive-Library staff will go to great lengths to give you the information you need, and they are fully qualified to do so. They are especially trained to communicate with physicians—they speak your language. Half of the staff have graduate degrees in various areas and many have two masters degrees, one in library science and another in a chosen field such as economics, history or the biological and social sciences.

If you are a history buff, one of the more interesting areas of the Library is the Archive Section which houses documents and artifacts on the history of American medicine and the AMA. If you are at all interested in the progress of organized medicine, in the AMA or in tracing your ancestry or doing other historical research, the Archives hold a wealth of information for you.

The Library is always improving and enlarging its facilities. The last addition to the services was the International Health Section which has made it possible for all of the Library services to follow you, as a member of the AMA, wherever you go, whether it be the remote mountain stretches of West

Pakistan, the rain forests of Brazil or a center of civilization such as Paris.

If you are planning an overseas trip or sabbatical, to set up practice or to attend a meeting or congress, the Library can give you all the information you need on foreign medical organizations, hospital and medical facilities in various countries, living conditions, what you should bring and the locations of the nearest American physician in any country.

The staff can also furnish you with information on a comprehensive and up-to-date listing of medical meetings outside the United States. After you are situated abroad the Library will continue to provide you with research facilities and photocopy services on specific medical subjects just as they did when you were stateside.

Any of the services of the Archive-Library are available to you by mail, telephone (312-527-1500), TWX (910-221-0300), telex (254-020) or in person. Library hours are 8:30 a. m. to 4:45 p. m. Monday through Friday.

Copies of a "Guide to Services of the Archive-Library Department," a 16-page pamphlet, will soon be available through the AMA for your further information on this AMA service.



Does he need a tranquilizer or a stimulus?

Reprinted from C. M. D.

Man's Cold War With Insects

Each spring man emerges from his winter cocoon by the fire and treks back to nature—at least as far as the back yard. This invariably brings up the problem of how to keep nature off his back.

In the pursuit of summertime, man finds himself open to assault by life in the wild—easy prey for the stings of raging insects and a favorite subject for mastication by nearly everything from mites on up.

Ironically, it is not the fanged monsters of the animal kingdom that cause the major havoc. In fact damage to human life seems to be inversely related to the size of the beast. Elephants fear men, but ticks, fleas, lice and mosquitos don't.

The indiscriminate boring and biting of these insignificant insects produce malaria, yellow fever, typhus, plague, dengue and a lot of other diseases that don't even have names. The world-wide death toll caused by germ-spreading insects is so staggering that it has never even been totaled with any accuracy.

While insect-induced deaths are highest in the tropics, some Northern cities in recent years have reported an upsurge in parasitic diseases imported from the hot climates. A study read before the American Medical Association traced the influx to immigrations from the Caribbean and the annual visit of 2,000,000 Americans to foreign countries.

There are also several insect-borne diseases native to the temperate zone. One type of encephalitis (sleeping sickness) caused a wave of near panic in southern New Jersey in 1959. A rare variety of New Jersey's famous mosquito population was found to be spreading the disease. In that year, 2,437

people were reported stricken by encephalitis in the United States, and this figure may have been "seriously incomplete," statisticians said.

Another fatal disease found throughout much of the United States is Rocky Mountain spotted fever. It is caused by ticks that inject fever-carrying organisms into the body while dining on the blood of their host. Several types of ticks are known carriers, including the variety that your pet poodle can bring into your house.

Tick bites also have been found to cause Colorado tick fever and a type of paralysis somewhat like polio. In fact the two types of paralysis on occasion have been confused and one case of "polio" cleared up as soon a tick was removed from under the patient's arm.

Cold war between man and the animal kingdom goes back to the Garden of Eden when snakes had legs and powers of persuasion. Actually the serpent was probably miscast as the tempter of Eve, some zoologists feel. They point out that the slithering beasts are really quite retiring.

That may be, but it's also true that snakes do blunder into biting an average of 1,500 people a year in this country. At least one variety of America's four poisonous snakes can be found in every state except Maine and Alaska.

The deadliness of the'r poison is probably vastly over-rated. Of those bitten, about 20 persons die each year. Most of the victims are children. One authority maintains that shock brought about by fear probably is responsible for more deaths than the actual poison.

Not that snake bites are all one way. Sometimes it doesn't do the reptile any good either. There was the cobra, for instance, that bit its handler. The handler recovered

A Science Feature Article prepared by the Communications Division, American Medical Association.

but not the snake. It dislocated its jaw in the encounter and died of infection a few days later.

Poisonous spiders have an even tougher time killing people. While their venom is far stronger than a snake's, they have less of it to inject. Also, the dwindling number of outdoor privies has eliminated one of the spider's favorite habitats.

Until a few years ago, the United States was supposed to have only one poisonous spider—the black widow. But recently, brown spiders—dark cinnamon in color with a vaguely purplish body—have been found in Texas, Oklahoma, Kansas and Missouri. Their bite is about as poisonous as a black widow's. The brown spider is believed to have migrated to this country from tropical America and become acclimated.

Perhaps man's best friend against spiders is a drab old mare, who was a failure as a plow horse. She's now engaged by a drug

manufacturer to run the only factory for the production of black widow anti-toxin. Injected with venom, the old mare produces anti-toxins in her blood serum which is then drawn off and used in treating spider victims.

When it comes to lethal output, however, big snakes and ugly spiders both take a back seat to a group of common bugs who go by the name of Hymenoptera. These are honeybees, wasps, hornets, yellowjackets, ants, etc.

The first recorded insect death was written in hieroglyphics on the tomb of an Egyptian king. It tells how the pharaoh sailed to Britain, was stung by a "hornet" as he stepped ashore and died almost immediately. That was 4,700 years ago.

Drop for drop, the venom injected by a honeybee's stinger is just as poisonous as a rattlesnake, but there are a lot fewer drops. While it delivers only a minute amount, the bee's method is unique. The stinger complete

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Assistant Professor of Psychiatry and Medical Director

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with poison sack and muscles ripped out, killing the bee. But the muscles which remain with the sack will go on squeezing poison through the stinger for as long as 20 minutes.

The normal reaction to this poison is a burning itch. Bee keepers have survived 200 stings at one time. But for some people a few stings can be fatal.

It's not the poison that does the killing in these cases, says Dr. W. W. Bauer, director emeritus of health education for the American Medical Association. Rather, the proteins contained in the venom set up an allergic reaction.

Just one sting can sensitize some people and a subsequent sting, even months later, may trigger asthma, shock or death.

Some physicians say it is quite likely that more people die of this type of reaction than is now realized. The sting is usually so small that it is sometimes overlooked and death is recorded as due to heat prostration or heart failure.

Besides bees, the bite of fire ants (another wanderer from South America), flies, chiggers and the sting of the poison-tipped spines of the Southern woolly worm can produce allergic reactions.

Usually sensitive people have some warning of their condition and special "survival kits" are prepared for them by some physicians. In addition, about 95 per cent of the allergy cases can be desensitized by weak injections prepared from ground-up insects or their venom.

Probably the most expensive bite is delivered by man's alleged friend, the dog. Besides the expense of housing and feeding a surging pooch population—now estimated at 25,000,000—Americans shell out about \$5,000,000 annually for dog bite treatment, the U. S. Public Health Service reports. According to government figures 600,000 persons are bitten annually.

Unless we exterminate the animal kingdom, which would probably bring about

world-wide starvation, it is impossible to avoid their bites and stings. About all we can do is maintain our defenses.

Typhus, plague and other dreaded diseases, for instance, are known to be present in the rat and mammal population of several Southern cities. Only the veneer of our civilization, our sanitation measures and health habits, prevent such diseases from spreading to the human population via fleas, mosquitos and other biting insects.

As for the venomous beasts and infected pets, staying clear of their fangs is mostly a matter of common sense—not teasing dogs, being alert in the woods and fields for snakes and spiders. When they do bite, excellent medical counter-measures are available. A speedy visit to a doctor is always the best antidote.

Obviously the only foolproof defense is a sealed room. Yet the pests and dangers of the outdoors are as nothing compared to the consequences of a sedentary existence, medical experts agree.

So it seems that while man might be master of the earth, he must still come to grips with his ancient animal antagonists. Even in his largest metropolises he is not completely out of the jungle yet.

Anesthesia Court Decisions

"Cases on Anesthesia," a collection of court decisions relating to physician or hospital liability arising out of the administration of anesthesia, is now available to any physician upon request.

This most recent in a series of collections of cases, published by the Department of Legal Research, Law Division, American Medical Association, covers such medical problems as contraindications, allergic reactions, intubation, explosions or burns and extravasation. Also included are legal topics such as consent, vicarious liability and statute of limitations.

Dr. Clark Describes Research

The Medical Center's Dr. Leland C. Clark, professor of biochemistry in the Department of Surgery, described his research concerning liquid breathing mice, on the CBS Television program *The 21st Century*, Sunday, May 7, at 3:00 p. m., Sunday's segment, entitled, "Conquering the Sea," showed how Dr. Clark discovered that animals can be made to breathe while submerged in some oils, such as silicone oil, and in fluorochemical liquids. Most importantly, the animals survive after the liquid is drained from the lungs.

The program, concerning man's future attempts to explore the ocean depths, was narrated by Walter Cronkite.

In describing his work, Dr. Clark said it has been previously known that mice could breathe saline (salt solution) saturated with oxygen under very high pressure ten times that of our atmosphere, but the procedure was cumbersome and the animals died after removal from the fluid. Dr. Clark has found that the silicone oil and fluorochemical liquids dissolved so much oxygen that it was necessary only to bubble oxygen into the liquid before immersing the mice. When the mice are submerged, their lungs fill with the liquid, and oxygen diffuses into the blood stream. The liquids used dissolve over 20 times as much oxygen as water and are so inert and non-toxic that large amounts can even be injected into animals without damage. The liquids are thin enough to pour and have the general appearance of water.

The importance of the finding lies in the fact that man could breathe such liquids to escape from a submarine, without getting the bends, because the amount of gas dissolved in the fluid can be easily controlled to be the same as that normally breathed. Bends are caused by bubbles forming in the

blood, as they form in soft drinks when they are uncapped. The bubbles block blood vessels.

Further, since liquids are incompressible, a liquid in a safety device would not be affected by great amounts of pressure. Dr. Clark and a colleague in Miami, Dr. Frank Gollan, have already demonstrated that mice can be decompressed from pressure equal to being 1000 feet deep in the ocean in only five seconds and survive, if the mice are breathing these special liquids. Normally, it would take a day to decompress from this depth.

The fluorochemicals are made to be used as transformer oils, while silicone oils are used as hydraulic fluids, hand creams, and in heart-lung machines, Dr. Clark said.

Yet another significant aspect of Dr. Clark's work is the discovery that rabbit hearts continue to beat when these liquids, instead of blood, are pumped into their arteries. By making particles of similar liquids, Dr. Clark believes it may be possible to make artificial blood cells, and he is already working on this.

Dr. Clark also pointed out that animals breathing liquids are less affected by the forces of acceleration and deceleration. Thus, the possibility is suggested of astronauts breathing liquids during periods of extreme acceleration and deceleration.

Dr. Clark has been responsible for a number of significant medical innovations. He invented the bubble-defoam heart lung machine, an electrode to measure oxygen, an electric thermometer widely used in hospitals, a method to detect heart defects using an electrode catheter, and has pioneered in the use of chemical monitoring in cardiovascular and stroke surgery.

Physician Service Payments To Independent Laboratories

In the April 21 Blue Shield Newslines/Medicare issue the following subject: "Notification to Physicians Regarding Payment for Services Furnished by Independent Laboratories" was released.

According to Joe Vance, Vice President-Medicare, a change which will be of interest to many of the physicians older patients is scheduled to take place within a short time in the procedure for payment for services of independent laboratories under the medicare program. *Services rendered by an independent laboratory after May 15, 1967, may be reimbursed under Part B. of the Medicare program only if the laboratory appears on a list of approved laboratories.*

List of independent laboratories which have been approved under the program's health and safety standards appears below.

Generally speaking, an independent laboratory is, for medicare purposes, any out-of-hospital clinical laboratory, other than one maintained by a physician simply as an adjunct to his practice and for his own patients—such private office lab services will be billed and paid as in the past.

Any questions relating to the reimbursement for services of independent laboratories under the program, Mr. Vance said to contact the Blue Shield Blue Cross office in Birmingham.

Drs. Lochte and Lincoln, Pathology Laboratory, 341 South Ripley Street, Montgomery, Alabama 36104;

Cunningham, Scott and Bishop Laboratory, 1529 North 25th Street, Birmingham, Alabama;

Dr. Albert E. Casey and Associates, 924 S. 18th St., Birmingham, Alabama 35205;

Drs. Bush and Johnson Medical Laboratory, 702 Noojin Building, Gadsden, Alabama 35901;

Medical Laboratory Associates, 1025 South

18th Street, Birmingham, Alabama 35205

Pathology Laboratory, Walker B. Sorrell, M. D., Pathologist, 750 Washington Avenue, Montgomery, Alabama 36104;

Robert B. Adams Pathology Laboratory, 2119 East South Boulevard, Montgomery, Alabama 36106;

Selma Pathology Laboratories, Guy Hood, MD, 311 Dallas Ave., P. O. Box 1022, Selma, Alabama 36701;

Tuscaloosa Pathology Laboratory, 518 10th Street, East, Tuscaloosa, Alabama 35401;

Medical Laboratory, 805 Madison Street, Huntsville, Alabama 35801;

Doctors Center Laboratory, 509 West Main, Dothan, Alabama 36301.

Voluntary Faculty Appointed

Matthew F. McNulty, Jr., Dean, School of Health Services Administration, University of Alabama in Birmingham, announced on March 1, the following appointments to the voluntary faculty of that School:

Robert W. Holters, Assistant Professor

Sister Mary Bourke, Adjunct Assistant Professor

John Cecil Hamiter, Adjunct Assistant Professor

Clyde G. Cox, Adjunct Assistant Professor

Edward G. Hertfelder, Jr., Assistant Professor

A. Charles Collier, Instructor

Vernon W. Fernandez, Instructor

Arthur G. Garikes, Instructor

Charles M. King, Jr., Instructor

Franklin K. Parker, Instructor

Mary Edna Williams, R. N., Instructor

The above faculty appointments were made in recognition of the contribution of these individuals to graduate education in the field of hospital and health service administration.

Mr. Holters is Administrator of the Uni-

versity of Alabama Hospitals and Clinics; Sister Mary is Administrator of St. Vincents Hospital; Mr. Cox is Director of Veterans Administration Hospital; Mr. Hamiter is Administrator of the Baptist Memorial Hospital, Gadsden, Alabama. All the others are members of the Administrative Staff of the University of Alabama Hospitals and Clinics.

Medical Films On Loan

A total of 14,064 medical and health films were lent to physicians, hospitals, medical schools or other professional groups by the American Medical Association Film Library during 1966.

Most of the films were employed as educational material for physicians, medical students, nurses and paramedical students.

The number of bookings was the greatest ever recorded at the library, increasing 21 per cent over 1965. Total bookings have increased each year since 1955 when 3,007 were recorded, according to an analysis prepared by Ralph Creer, director of the AMA Section on Medical Motion Pictures and Television.

A major portion of the increase was due to the addition of films formerly distributed by the Association of American Medical Colleges and the American College of Obstetricians and Gynecologists. Analyzing 1966 film bookings further, he said that the largest single users of films from the AMA library were civilian hospitals and schools of nursing. Every U. S. medical school except two and 10 foreign medical schools used the services of the Film Library during the year. Paramedical schools were increasingly heavy users accounting for over 10 per cent of the total bookings.

The library now consists of 2,269 copies of 489 films. The total includes 124 health films which can be used by physicians who are invited to address lay groups. A current list of these films is now available.

A new and revised edition of "Medical and

Surgical Motion Pictures," the American Medical Association's catalog of selected medical and health films, is now available. More than 1,000 new film titles have been added in the new edition of the catalog, bringing the total film listings to more than 4,000. Copies of the catalog are available without charge from the Medical Motion Picture Section, Department of Postgraduate Programs, American Medical Association, 535 N. Dearborn St., Chicago, Ill. 60610.

Hair Spray Study

Inhalation of hair spray apparently is harmless and causes neither lung disease nor other damage to the lungs, a study among beauticians indicates.

Drs. Om P. Sharma and M. Henry Williams, Jr., of the Albert Einstein College of Medicine, New York, conducted pulmonary function studies in 62 beauty salon employees who had worked for more than two years; 33 medical students, doctors and hospital technicians were used as controls for comparison.

There was no evidence of significant impairment in the beauticians and there was no relationship between the lung diffusing capacity and the duration of exposure to hair spray. Based on their findings, the investigators concluded: "There is little evidence for the concept that exposure to hair spray is associated with significant impairment of pulmonary function or disease."

Since the use of hair sprays is almost universal, the question of their possible toxicity is a relevant one, the authors said. Although certain investigators have proposed that a type of pulmonary disease, known as thesaurosis, is caused by hair sprays, the present study revealed no radiologic evidence of this condition in any of the beauty operators. No abnormality of pulmonary function was found.

INDEX TO ADVERTISERS

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Hill Crest Hospital	1525	Searle	1482, 1483
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Lederle Laboratories	1512, 1513, 1514, 1515, 1531	The Stuart Company	1423
Eli Lilly & Company	1st Cover, 1432, 1433, 1434, 1444, 1445, 1466, 1532, 1533, 1534	Syntex Laboratories	1450, 1451, 1452, 1453
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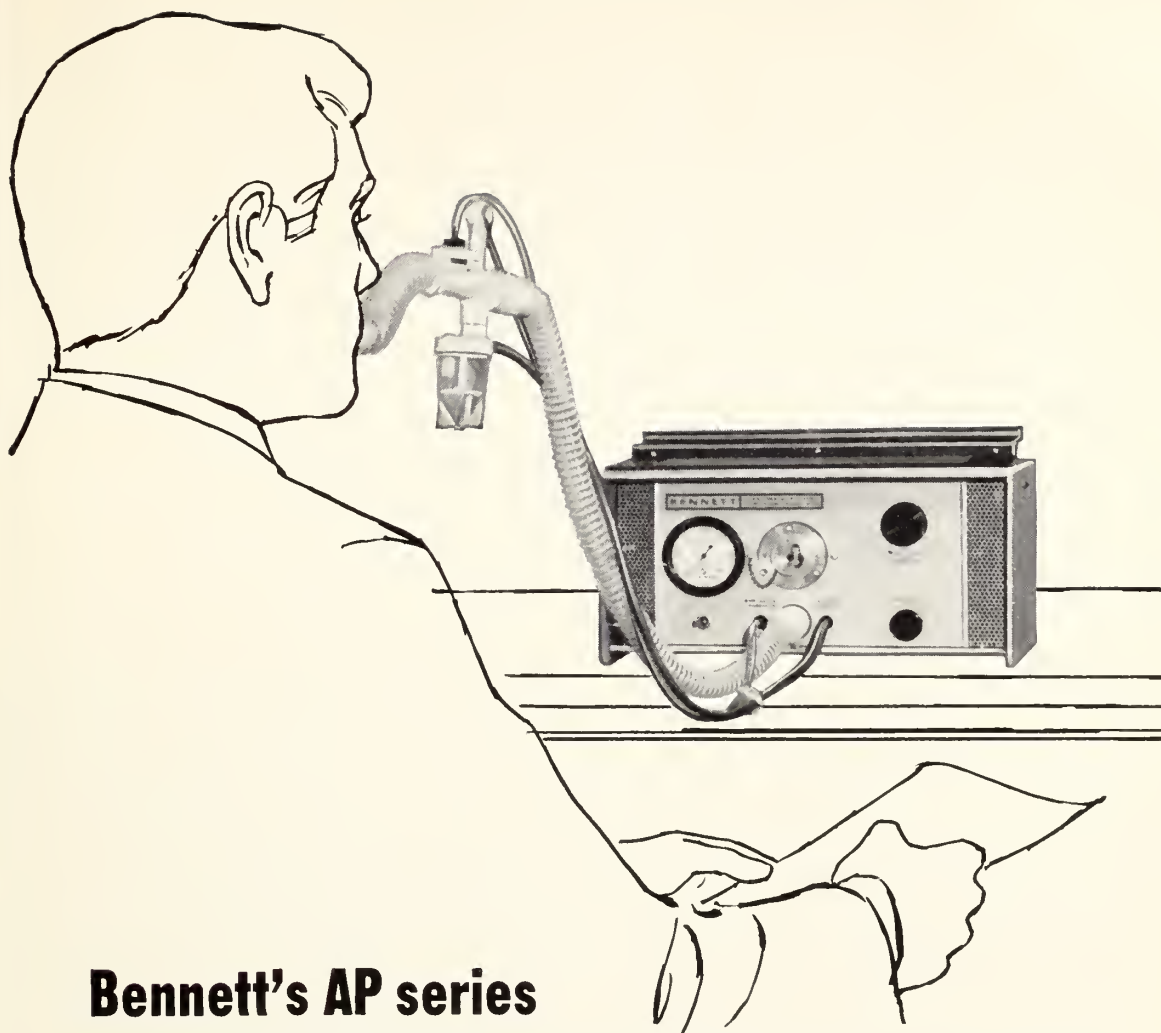
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